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<151> 2004-12-16

<160> 88

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<210> 1

<211> 209

<212> PRT

<213> Mus musculus

<400> 1

Tyr Pro Pro Ala Ser Pro Ser Asn Leu Ser Cys Leu Met His Leu Thr
1 5 10 15

Thr Asn Ser Leu Val Cys Gln Trp Glu Pro Gly Pro Glu Thr His Leu
20 25 30

Pro Thr Ser Phe Ile Leu Lys Ser Phe Arg Ser Arg Ala Asp Cys Gln
35 40 45

Tyr Gln Gly Asp Thr Ile Pro Asp Cys Val Ala Lys Lys Arg Gln Asn
50 55 60

Asn Cys Ser Ile Pro Arg Lys Asn Leu Leu Leu Tyr Gln Tyr Met Ala
65 70 75 80

Ile Trp Val Gln Ala Glu Asn Met Leu Gly Ser Ser Glu Ser Pro Lys
85 90 95

Leu Cys Leu Asp Pro Met Asp Val Val Lys Leu Glu Pro Pro Met Leu
100 105 110

Gln Ala Leu Asp Ile Gly Pro Asp Val Val Gly Cys Leu Trp Leu Ser
115 120 125

Trp Lys Pro Trp Lys Pro Ser Glu Tyr Met Glu Gln Glu Cys Glu Leu
130 135 140

Arg Tyr Gln Pro Gln Leu Lys Gly Ala Asn Trp Thr Leu Val Phe His

145 150 155 160

Leu Pro Ser Ser Lys Asp Gln Phe Glu Leu Cys Gly Leu His Gln Ala
165 170 175

Pro Val Tyr Thr Leu Gln Met Arg Cys Ile Arg Ser Ser Leu Pro Gly
180 185 190

Phe Trp Ser Pro Trp Ser Pro Gly Leu Gln Leu Arg Pro Thr Met Lys
195 200 205

Ala

<210> 2
<211> 210
<212> PRT
<213> Homo sapiens

<400> 2

Tyr Pro Pro Ala Ile Pro His Asn Leu Ser Cys Leu Met Asn Leu Thr
1 5 10 15

Thr Ser Ser Leu Ile Cys Gln Trp Glu Pro Gly Pro Glu Thr His Leu
20 25 30

Pro Thr Ser Phe Thr Leu Lys Ser Phe Lys Ser Arg Gly Asn Cys Gln
35 40 45

Thr Gln Gly Asp Ser Ile Leu Asp Cys Val Pro Lys Asp Gly Gln Ser
50 55 60

His Cys Cys Ile Pro Arg Lys His Leu Leu Leu Tyr Gln Asn Met Gly
65 70 75 80

Ile Trp Val Gln Ala Glu Asn Ala Leu Gly Thr Ser Met Ser Pro Gln
85 90 95

Leu Cys Leu Asp Pro Met Asp Val Val Lys Leu Glu Pro Pro Met Leu
100 105 110

Arg Thr Met Asp Pro Ser Pro Glu Ala Ala Pro Gly Cys Leu Gln Leu
115 120 125

Cys Trp Glu Pro Trp Gln Pro Gly Leu His Ile Asn Gln Lys Cys Glu
130 135 140

Leu Arg His Lys Pro Gln Arg Gly Glu Ala Ser Trp Ala Leu Val Gly
 145 150 155 160

Pro Leu Pro Leu Glu Ala Leu Gln Tyr Glu Leu Cys Gly Leu Leu Pro
 165 170 175

Ala Thr Ala Tyr Thr Leu Gln Ile Arg Cys Ile Arg Trp Pro Leu Pro
 180 185 190

Gly His Trp Ser Asp Trp Ser Pro Ser Leu Glu Leu Arg Thr Thr Glu
 195 200 205

Arg Ala
 210

<210> 3
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 3

Glu Thr Ile Pro Leu Gln Thr Leu Arg Cys Tyr Asn Asp Tyr Thr Ser
 1 5 10 15

His Ile Thr Cys Arg Trp Ala Asp Thr Gln Asp Ala Gln Arg Leu Val
 20 25 30

Asn Val Thr Leu Ile Arg Arg Val Asn Glu Asp Leu Leu Glu Pro Val
 35 40 45

Ser Cys Asp Leu Ser Asp Asp Met Pro Trp Ser Ala Cys Pro His Pro
 50 55 60

Arg Cys Val Pro Arg Arg Cys Val Ile Pro Cys Gln Ser Phe Val Val
 65 70 75 80

Thr Asp Val Asp Tyr Phe Ser Phe Gln Pro Asp Arg Pro Leu Gly Thr
 85 90 95

Arg Leu Thr Val Thr Leu Thr Gln His Val Gln Pro Pro Glu Pro Arg
 100 105 110

Asp Leu Gln Ile Ser Thr Asp Gln Asp His Phe Leu Leu Thr Trp Ser
 115 120 125

Val Ala Leu Gly Ser Pro Gln Ser His Trp Leu Ser Pro Gly Asp Leu
130 135 140

Glu Phe Glu Val Val Tyr Lys Arg Leu Gln Asp Ser Trp Glu Asp Ala
145 150 155 160

Ala Ile Leu Leu Ser Asn Thr Ser Gln Ala Thr Leu Gly Pro Glu His
165 170 175

Leu Met Pro Ser Ser Thr Tyr Val Ala Arg Val Arg Thr Arg Leu Ala
180 185 190

Pro Gly Ser Arg Leu Ser Gly Arg Pro Ser Lys Trp Ser Pro Glu Val
195 200 205

Cys Trp Asp Ser Gln Pro Gly
210 215

<210> 4
<211> 214
<212> PRT
<213> Mus musculus

<400> 4

Glu Thr Val Pro Leu Lys Thr Leu Gln Cys Tyr Asn Asp Tyr Thr Asn
1 5 10 15

His Ile Ile Cys Ser Trp Ala Asp Thr Glu Asp Ala Gln Gly Leu Ile
20 25 30

Asn Met Thr Leu Tyr His Gln Leu Glu Lys Lys Gln Pro Val Ser Cys
35 40 45

Glu Leu Ser Glu Lys Leu Met Trp Ser Glu Cys Pro Ser Ser His Arg
50 55 60

Cys Val Pro Arg Arg Cys Val Ile Pro Tyr Thr Arg Phe Ser Ile Thr
65 70 75 80

Asn Glu Asp Tyr Tyr Ser Phe Arg Pro Asp Ser Asp Leu Gly Ile Gln
85 90 95

Leu Met Val Pro Leu Ala Gln Asn Val Gln Pro Pro Leu Pro Lys Asn
100 105 110

Val Ser Ile Ser Ser Ser Glu Asp Arg Phe Leu Leu Glu Trp Ser Val
115 120 125

Ser Leu Gly Asp Ala Gln Val Ser Trp Leu Ser Ser Lys Asp Ile Glu
130 135 140

Phe Glu Val Ala Tyr Lys Arg Leu Gln Asp Ser Trp Glu Asp Ala Tyr
145 150 155 160

Ser Leu His Thr Ser Lys Phe Gln Val Asn Phe Glu Pro Lys Leu Phe
165 170 175

Leu Pro Asn Ser Ile Tyr Ala Pro Arg Val Arg Thr Arg Leu Tyr Pro
180 185 190

Gly Ser Ser Leu Ser Gly Arg Pro Ser Arg Trp Ser Pro Glu Ala His
195 200 205

Trp Asp Ser Gln Pro Gly
210

<210> 5
<211> 215
<212> PRT
<213> Mus musculus

<400> 5

Glu Thr Val Pro Leu Lys Thr Leu Glu Cys Tyr Asn Asp Tyr Thr Asn
1 5 10 15

Arg Ile Ile Cys Ser Trp Ala Asp Thr Glu Asp Ala Gln Gly Leu Ile
20 25 30

Asn Met Thr Leu Leu Tyr His Gln Leu Asp Lys Ile Gln Ser Val Ser
35 40 45

Cys Glu Leu Ser Glu Lys Leu Met Trp Ser Glu Cys Pro Ser Ser His
50 55 60

Arg Cys Val Pro Arg Arg Cys Val Ile Pro Tyr Thr Arg Phe Ser Asn
65 70 75 80

Gly Asp Asn Asp Tyr Tyr Ser Phe Gln Pro Asp Arg Asp Leu Gly Ile
85 90 95

Gln Leu Met Val Pro Leu Ala Gln His Val Gln Pro Pro Pro Pro Lys
100 105 110

Asp Ile His Ile Ser Pro Ser Gly Asp His Phe Leu Leu Glu Trp Ser
 115 120 125

Val Ser Leu Gly Asp Ser Gln Val Ser Trp Leu Ser Ser Lys Asp Ile
 130 135 140

Glu Phe Glu Val Ala Tyr Lys Arg Leu Gln Asp Ser Trp Glu Asp Ala
 145 150 155 160

Ser Ser Leu His Thr Ser Asn Phe Gln Val Asn Leu Glu Pro Lys Leu
 165 170 175

Phe Leu Pro Asn Ser Ile Tyr Ala Ala Arg Val Arg Thr Arg Leu Ser
 180 185 190

Ala Gly Ser Ser Leu Ser Gly Arg Pro Ser Arg Trp Ser Pro Glu Val
 195 200 205

His Trp Asp Ser Gln Pro Gly
 210 215

<210> 6
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 6

Gly Asp Glu Ala Gln Pro Gln Asn Leu Glu Cys Phe Phe Asp Gly Ala
 1 5 10 15

Ala Val Leu Ser Cys Ser Trp Glu Val Arg Lys Glu Val Ala Ser Ser
 20 25 30

Val Ser Phe Gly Leu Phe Tyr Lys Pro Ser Pro Asp Ala Gly Glu Glu
 35 40 45

Glu Cys Ser Pro Val Leu Arg Glu Gly Leu Gly Ser Leu His Thr Arg
 50 55 60

His His Cys Gln Ile Pro Val Pro Asp Pro Ala Thr His Gly Gln Tyr
 65 70 75 80

Ile Val Ser Val Gln Pro Arg Arg Ala Glu Lys His Ile Lys Ser Ser
 85 90 95

Val Asn Ile Gln Met Ala Pro Pro Ser Leu Asn Val Thr Lys Asp Gly
 100 105 110

Asp Ser Tyr Ser Leu Arg Trp Glu Thr Met Lys Met Arg Tyr Glu His
 115 120 125

Ile Asp His Thr Phe Glu Ile Gln Tyr Arg Lys Asp Thr Ala Thr Trp
 130 135 140

Lys Asp Ser Lys Thr Glu Thr Leu Gln Asn Ala His Ser Met Ala Leu
 145 150 155 160

Pro Ala Leu Glu Pro Ser Thr Arg Tyr Trp Ala Arg Val Arg Val Arg
 165 170 175

Thr Ser Arg Thr Gly Tyr Asn Gly Ile Trp Ser Glu Trp Ser Glu Ala
 180 185 190

Arg Ser Trp Asp Thr Glu Ser Val
 195 200

<210> 7
 <211> 200
 <212> PRT
 <213> Mus musculus

<400> 7

Gly Asp Lys Ala Gln Pro Gln Asn Leu Gln Cys Phe Phe Asp Gly Ile
 1 5 10 15

Gln Ser Leu His Cys Ser Trp Glu Val Trp Thr Gln Thr Thr Gly Ser
 20 25 30

Val Ser Phe Gly Leu Phe Tyr Arg Pro Ser Pro Val Ala Pro Glu Glu
 35 40 45

Lys Cys Ser Pro Val Val Lys Glu Pro Pro Gly Ala Ser Val Tyr Thr
 50 55 60

Arg Tyr His Cys Ser Leu Pro Val Pro Glu Pro Ser Ala His Ser Gln
 65 70 75 80

Tyr Thr Val Ser Val Lys His Leu Glu Gln Gly Lys Phe Ile Met Ser
 85 90 95

Tyr Asn His Ile Gln Met Glu Pro Pro Thr Leu Asn Leu Thr Lys Asn
 100 105 110

Arg Asp Ser Tyr Ser Leu His Trp Glu Thr Gln Lys Met Ala Tyr Ser
115 120 125

Phe Ile Glu His Thr Phe Gln Val Gln Tyr Lys Lys Lys Ser Asp Ser
130 135 140

Trp Glu Asp Ser Lys Thr Glu Asn Leu Asp Arg Ala His Ser Met Asp
145 150 155 160

Leu Ser Gln Leu Glu Pro Asp Thr Ser Tyr Cys Ala Arg Val Arg Val
165 170 175

Lys Pro Ile Ser Asn Tyr Asp Gly Ile Trp Ser Lys Trp Ser Glu Glu
180 185 190

Tyr Thr Trp Lys Thr Asp Trp Val
195 200

<210> 8
<211> 198
<212> PRT
<213> Mus musculus

<400> 8

Gly Asp Lys Ala Gln Pro Gln Asn Leu Gln Cys Phe Phe Asp Gly Ile
1 5 10 15

Gln Ser Leu His Cys Ser Trp Glu Val Trp Thr Gln Thr Thr Gly Ser
20 25 30

Val Ser Phe Gly Leu Phe Tyr Arg Pro Ser Pro Ala Ala Pro Glu Glu
35 40 45

Lys Cys Ser Pro Val Val Lys Glu Pro Gln Ala Ser Val Tyr Thr Arg
50 55 60

Tyr Arg Cys Ser Leu Pro Val Pro Glu Pro Ser Ala His Ser Gln Tyr
65 70 75 80

Thr Val Ser Val Lys His Leu Glu Gln Gly Lys Phe Ile Met Ser Tyr
85 90 95

Tyr His Ile Gln Met Glu Pro Pro Ile Leu Asn Gln Thr Lys Asn Arg
100 105 110

Asp Ser Tyr Ser Leu His Trp Glu Thr Gln Lys Ile Pro Lys Tyr Ile
115 120 125

Asp His Thr Phe Gln Val Gln Tyr Lys Lys Lys Ser Glu Ser Trp Lys
 130 135 140

Asp Ser Lys Thr Glu Asn Leu Gly Arg Val Asn Ser Met Asp Leu Pro
 145 150 155 160

Gln Leu Glu Pro Asp Thr Ser Tyr Cys Ala Arg Val Arg Val Lys Pro
 165 170 175

Ile Ser Asp Tyr Asp Gly Ile Trp Ser Glu Trp Ser Asn Glu Tyr Thr
 180 185 190

Trp Thr Thr Asp Trp Val
 195

<210> 9
 <211> 202
 <212> PRT
 <213> Homo sapiens

<400> 9

Leu Pro Pro Glu Lys Pro Lys Asn Leu Ser Cys Ile Val Asn Glu Gly
 1 5 10 15

Lys Lys Met Arg Cys Glu Trp Asp Gly Gly Arg Glu Thr His Leu Glu
 20 25 30

Thr Asn Phe Thr Leu Lys Ser Glu Trp Ala Thr His Lys Phe Ala Asp
 35 40 45

Cys Lys Ala Lys Arg Asp Thr Pro Thr Ser Cys Thr Val Asp Tyr Ser
 50 55 60

Thr Val Tyr Phe Val Asn Ile Glu Val Trp Val Glu Ala Glu Asn Ala
 65 70 75 80

Leu Gly Lys Val Thr Ser Asp His Ile Asn Phe Asp Pro Val Tyr Lys
 85 90 95

Val Lys Pro Asn Pro Pro His Asn Leu Ser Val Ile Asn Ser Glu Glu
 100 105 110

Leu Ser Ser Ile Leu Lys Leu Thr Trp Thr Asn Pro Ser Ile Lys Ser
 115 120 125

Val Ile Ile Leu Lys Tyr Asn Ile Gln Tyr Arg Thr Lys Asp Ala Ser
 130 135 140

Thr Trp Ser Gln Ile Pro Pro Glu Asp Thr Ala Ser Thr Arg Ser Ser
 145 150 155 160

Phe Thr Val Gln Asp Leu Lys Pro Phe Thr Glu Tyr Val Phe Arg Ile
 165 170 175

Arg Cys Met Lys Glu Asp Gly Lys Gly Tyr Trp Ser Asp Trp Ser Glu
 180 185 190

Glu Ala Ser Gly Ile Thr Tyr Glu Asp Arg
 195 200

<210> 10
 <211> 200
 <212> PRT
 <213> Mus musculus

<400> 10

Phe Pro Pro Asp Lys Pro Thr Asn Leu Thr Cys Ile Val Asn Glu Gly
 1 5 10 15

Lys Asn Met Leu Cys Gln Trp Asp Pro Gly Arg Glu Thr Tyr Leu Glu
 20 25 30

Thr Asn Tyr Thr Leu Lys Ser Glu Trp Ala Thr Glu Lys Phe Pro Asp
 35 40 45

Cys Gln Ser Lys His Gly Thr Ser Cys Met Val Ser Tyr Met Pro Thr
 50 55 60

Tyr Tyr Val Asn Ile Glu Val Trp Val Glu Ala Glu Asn Ala Leu Gly
 65 70 75 80

Lys Val Ser Ser Glu Ser Ile Asn Phe Asp Pro Val Asp Lys Val Lys
 85 90 95

Pro Thr Pro Pro Tyr Asn Leu Ser Val Thr Asn Ser Glu Glu Leu Ser
 100 105 110

Ser Ile Leu Lys Leu Ser Trp Val Ser Ser Gly Leu Gly Gly Leu Leu
 115 120 125

Asp Leu Lys Ser Asp Ile Gln Tyr Arg Thr Lys Asp Ala Ser Thr Trp
 130 135 140

Ile Gln Val Pro Leu Glu Asp Thr Met Ser Pro Arg Thr Ser Phe Thr
 145 150 155 160

Val Gln Asp Leu Lys Pro Phe Thr Glu Tyr Val Phe Arg Ile Arg Ser
 165 170 175

Ile Lys Asp Ser Gly Lys Gly Tyr Trp Ser Asp Trp Ser Glu Glu Ala
 180 185 190

Ser Gly Thr Thr Tyr Glu Asp Arg
 195 200

<210> 11
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 11

Asn Ser Ser Lys Glu Pro Lys Phe Thr Lys Cys Arg Ser Pro Glu Arg
 1 5 10 15

Glu Thr Phe Ser Cys His Trp Thr Asp Glu Val His His Gly Thr Lys
 20 25 30

Asn Leu Gly Pro Ile Gln Leu Phe Tyr Thr Arg Arg Asn Thr Gln Glu
 35 40 45

Trp Thr Gln Glu Trp Lys Glu Cys Pro Asp Tyr Val Ser Ala Gly Glu
 50 55 60

Asn Ser Cys Tyr Phe Asn Ser Ser Phe Thr Ser Ile Trp Ile Pro Tyr
 65 70 75 80

Cys Ile Lys Leu Thr Ser Asn Gly Gly Thr Val Asp Glu Lys Cys Phe
 85 90 95

Ser Val Asp Glu Ile Val Gln Pro Asp Pro Pro Ile Ala Leu Asn Trp
 100 105 110

Thr Leu Leu Asn Val Ser Leu Ala Asp Ile Gln Val Arg Trp Glu Ala
 115 120 125

Pro Arg Asn Ala Asp Ile Gln Lys Gly Trp Met Val Leu Glu Tyr Glu
 130 135 140

Leu Gln Tyr Lys Glu Val Asn Glu Thr Lys Trp Lys Met Met Asp Pro
 145 150 155 160

Ile Leu Thr Thr Ser Val Pro Val Tyr Ser Leu Lys Val Asp Lys Glu
 165 170 175

Tyr Glu Val Arg Val Arg Ser Lys Gln Arg Asn Ser Gly Asn Tyr Gly
 180 185 190

Glu Phe Ser Glu Val Leu Tyr Val Thr Leu Pro Gln Met Ser Gln Phe
 195 200 205

Thr Cys Glu Glu Asp
 210

<210> 12
 <211> 222
 <212> PRT
 <213> Mus musculus

<400> 12

Ser Ser Ser Gly Lys Pro Arg Phe Thr Lys Cys Arg Ser Pro Glu Leu
 1 5 10 15

Glu Thr Phe Ser Cys Tyr Trp Thr Glu Gly Asp Asn Pro Asp Leu Lys
 20 25 30

Thr Pro Gly Ser Ile Gln Leu Tyr Tyr Ala Lys Arg Glu Ser Gln Arg
 35 40 45

Gln Ala Ala Arg Ile Ala His Glu Trp Thr Gln Glu Trp Lys Glu Cys
 50 55 60

Pro Asp Tyr Val Ser Ala Gly Lys Asn Ser Cys Tyr Phe Asn Ser Ser
 65 70 75 80

Tyr Thr Ser Ile Trp Ile Pro Tyr Cys Ile Lys Leu Thr Thr Asn Gly
 85 90 95

Asp Leu Leu Asp Gln Lys Cys Phe Thr Val Asp Glu Ile Val Gln Pro
 100 105 110

Asp Pro Pro Ile Gly Leu Asn Trp Thr Leu Leu Asn Ile Ser Leu Gly
 115 120 125

Asp Ile Gln Val Ser Trp Gln Pro Pro Pro Asn Ala Asp Val Leu Lys

130

135

140

Gly Trp Ile Ile Leu Glu Tyr Glu Ile Gln Tyr Lys Glu Val Asn Glu
145 150 155 160

Ser Lys Trp Lys Val Met Gly Pro Ile Trp Leu Thr Tyr Cys Pro Val
165 170 175

Tyr Ser Leu Arg Met Asp Lys Glu His Glu Val Arg Val Arg Ser Arg
180 185 190

Gln Arg Ser Phe Glu Lys Tyr Ser Glu Phe Ser Glu Val Leu Arg Val
195 200 205

Ile Phe Pro Gln Thr Asn Ile Leu Glu Ala Cys Glu Glu Asp
210 215 220

<210> 13
<211> 205
<212> PRT
<213> Homo sapiens

<400> 13

Glu Pro Lys Asn Lys Thr Phe Leu Arg Cys Glu Ala Lys Asn Tyr Ser
1 5 10 15

Gly Arg Phe Thr Cys Trp Trp Leu Thr Thr Ile Ser Thr Asp Leu Thr
20 25 30

Phe Ser Val Lys Ser Ser Arg Gly Ser Ser Asp Pro Gln Gly Val Thr
35 40 45

Cys Gly Ala Ala Thr Leu Ser Ala Glu Arg Val Arg Gly Asp Asn Lys
50 55 60

Glu Tyr Glu Tyr Ser Val Glu Cys Gln Glu Asp Ser Ala Cys Pro Ala
65 70 75 80

Ala Glu Glu Ser Leu Pro Ile Glu Val Met Val Asp Ala Val His Lys
85 90 95

Leu Lys Tyr Glu Asn Tyr Thr Ser Ser Phe Phe Ile Arg Asp Ile Ile
100 105 110

Lys Pro Asp Pro Pro Lys Asn Leu Gln Leu Lys Pro Leu Lys Arg Gln
115 120 125

Val Glu Val Ser Trp Glu Tyr Pro Asp Thr Trp Ser Thr Pro His Ser
130 135 140

Tyr Phe Ser Leu Thr Phe Cys Val Gln Val Gln Gly Lys Ser Lys Arg
145 150 155 160

Glu Lys Lys Asp Arg Val Phe Thr Asp Lys Thr Ser Ala Thr Val Ile
165 170 175

Cys Arg Lys Asn Ala Ser Ile Ser Val Arg Ala Gln Asp Arg Tyr Tyr
180 185 190

Ser Ser Ser Trp Ser Glu Trp Ala Ser Val Pro Cys Ser
195 200 205

<210> 14
<211> 214
<212> PRT
<213> Mus musculus

<400> 14

Asn Phe Lys Asn Lys Thr Phe Leu Lys Cys Glu Ala Pro Asn Tyr Ser
1 5 10 15

Gly Arg Phe Thr Cys Ser Trp Leu Val Gln Arg Asn Met Asp Leu Lys
20 25 30

Phe Asn Ile Lys Ser Ser Ser Ser Ser Pro Asp Ser Arg Ala Val Thr
35 40 45

Cys Gly Met Ala Ser Leu Ser Ala Glu Lys Val Thr Leu Asp Gln Arg
50 55 60

Asp Tyr Glu Lys Tyr Ser Val Ser Cys Gln Glu Asp Val Thr Cys Pro
65 70 75 80

Thr Ala Glu Glu Thr Leu Pro Ile Glu Leu Ala Leu Glu Ala Arg Gln
85 90 95

Gln Asn Lys Tyr Glu Asn Tyr Ser Thr Ser Phe Phe Ile Arg Asp Ile
100 105 110

Ile Lys Pro Asp Pro Pro Lys Asn Leu Gln Met Lys Pro Leu Lys Asn
115 120 125

Ser Gln Val Glu Val Ser Trp Glu Tyr Pro Asp Ser Trp Ser Thr Pro
 130 135 140

His Ser Tyr Phe Ser Leu Lys Phe Phe Val Arg Ile Gln Arg Lys Lys
 145 150 155 160

Glu Lys Met Lys Glu Thr Glu Glu Gly Cys Asn Gln Lys Gly Ala Phe
 165 170 175

Leu Val Glu Lys Thr Ser Thr Glu Val Lys Cys Lys Gly Gly Asn Val
 180 185 190

Cys Val Gln Ala Gln Asp Arg Tyr Tyr Asn Ser Ser Cys Ser Lys Trp
 195 200 205

Ala Cys Val Pro Cys Arg
 210

<210> 15
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 15

Ala Ala Leu Leu Ala Ala Arg Gly Pro Glu Glu Leu Leu Cys Phe Thr
 1 5 10 15

Glu Arg Leu Glu Asp Leu Val Cys Phe Trp Glu Glu Ala Ala Ser Ala
 20 25 30

Gly Val Gly Pro Gly Asn Tyr Ser Phe Ser Tyr Gln Leu Glu Asp Glu
 35 40 45

Pro Trp Lys Leu Cys Arg Leu His Gln Ala Pro Thr Ala Arg Gly Ala
 50 55 60

Val Arg Phe Trp Cys Ser Leu Pro Thr Ala Asp Thr Ser Ser Phe Val
 65 70 75 80

Pro Leu Glu Leu Arg Val Thr Ala Ala Ser Gly Ala Pro Arg Tyr His
 85 90 95

Arg Val Ile His Ile Asn Glu Val Val Leu Leu Asp Ala Pro Val Gly
 100 105 110

Leu Val Ala Arg Leu Ala Asp Glu Ser Gly His Val Val Leu Arg Trp
 115 120 125

Leu Pro Pro Pro Glu Thr Pro Met Thr Ser His Ile Arg Tyr Glu Val
 130 135 140

Asp Val Ser Ala Gly Asn Gly Ala Gly Ser Val Gln Arg Val Glu Ile
 145 150 155 160

Leu Glu Gly Arg Thr Glu Cys Val Leu Ser Asn Leu Arg Gly Arg Thr
 165 170 175

Arg Tyr Thr Phe Ala Val Arg Ala Arg Met Ala Glu Pro Ser Phe Gly
 180 185 190

Gly Phe Trp Ser Ala Trp Ser Glu Pro Val Ser Leu Leu Thr Pro Ser
 195 200 205

Asp

<210> 16
 <211> 208
 <212> PRT
 <213> Mus musculus

<400> 16

Ala Ala Leu Leu Ala Ser Arg Gly Ser Glu Glu Leu Leu Cys Phe Thr
 1 5 10 15

Gln Arg Leu Glu Asp Leu Val Cys Phe Trp Glu Glu Ala Ala Ser Ser
 20 25 30

Gly Met Asp Phe Asn Tyr Ser Phe Ser Tyr Gln Leu Glu Gly Glu Ser
 35 40 45

Arg Lys Ser Cys Ser Leu His Gln Ala Pro Thr Val Arg Gly Ser Val
 50 55 60

Arg Phe Trp Cys Ser Leu Pro Thr Ala Asp Thr Ser Ser Phe Val Pro
 65 70 75 80

Leu Glu Leu Gln Val Thr Glu Ala Ser Gly Ser Pro Arg Tyr His Arg
 85 90 95

Ile Ile His Ile Asn Glu Val Val Leu Leu Asp Ala Pro Ala Gly Leu
 100 105 110

Leu Ala Arg Arg Ala Glu Glu Gly Ser His Val Val Leu Arg Trp Leu
 115 120 125

Pro Pro Pro Gly Ala Pro Met Thr Thr His Ile Arg Tyr Glu Val Asp
 130 135 140

Val Ser Ala Gly Asn Arg Ala Gly Gly Thr Gln Arg Val Glu Val Leu
 145 150 155 160

Glu Gly Arg Thr Glu Cys Val Leu Ser Asn Leu Arg Gly Gly Thr Arg
 165 170 175

Tyr Thr Phe Ala Val Arg Ala Arg Met Ala Glu Pro Ser Phe Ser Gly
 180 185 190

Phe Trp Ser Ala Trp Ser Glu Pro Ala Ser Leu Leu Thr Ala Ser Asp
 195 200 205

<210> 17
 <211> 205
 <212> PRT
 <213> Homo sapiens
 <400> 17

Val Pro Pro Glu Glu Pro Gln Leu Ser Cys Phe Arg Lys Ser Pro Leu
 1 5 10 15

Ser Asn Val Val Cys Glu Trp Gly Pro Arg Ser Thr Pro Ser Leu Thr
 20 25 30

Thr Lys Ala Val Leu Leu Val Arg Lys Phe Gln Asn Ser Pro Ala Glu
 35 40 45

Asp Phe Gln Glu Pro Cys Gln Tyr Ser Gln Glu Ser Gln Lys Phe Ser
 50 55 60

Cys Gln Leu Ala Val Pro Glu Gly Asp Ser Ser Phe Tyr Ile Val Ser
 65 70 75 80

Met Cys Val Ala Ser Ser Val Gly Ser Lys Phe Ser Lys Thr Gln Thr
 85 90 95

Phe Gln Gly Cys Gly Ile Leu Gln Pro Asp Pro Pro Ala Asn Ile Thr
 100 105 110

Val Thr Ala Val Ala Arg Asn Arg Trp Leu Ser Val Thr Trp Gln Asp

| | | |
|---|-----|---------|
| 115 | 120 | 125 |
| Pro His Ser Trp Asn Ser Ser Phe Tyr Arg Leu Arg Phe Glu Leu Arg | | |
| 130 | 135 | 140 |
| Tyr Arg Ala Glu Arg Ser Lys Thr Phe Thr Thr Trp Met Val Lys Asp | | |
| 145 | 150 | 155 160 |
| Leu Gln His His Cys Val Ile His Asp Ala Trp Ser Gly Leu Arg His | | |
| | 165 | 170 175 |
| Val Val Gln Leu Arg Ala Gln Glu Glu Phe Gly Gln Gly Glu Trp Ser | | |
| | 180 | 185 190 |
| Glu Trp Ser Pro Glu Ala Met Gly Thr Pro Trp Thr Glu | | |
| | 195 | 200 205 |
| <210> 18 | | |
| <211> 205 | | |
| <212> PRT | | |
| <213> Mus musculus | | |
| <400> 18 | | |
| Val Pro Pro Glu Glu Pro Lys Leu Ser Cys Phe Arg Lys Asn Pro Leu | | |
| 1 | 5 | 10 15 |
| Val Asn Ala Ile Cys Glu Trp Arg Pro Ser Ser Thr Pro Ser Pro Thr | | |
| | 20 | 25 30 |
| Thr Lys Ala Val Leu Phe Ala Lys Lys Ile Asn Thr Thr Asn Gly Lys | | |
| | 35 | 40 45 |
| Ser Asp Phe Gln Val Pro Cys Gln Tyr Ser Gln Gln Leu Lys Ser Phe | | |
| | 50 | 55 60 |
| Ser Cys Gln Val Glu Ile Leu Glu Gly Asp Lys Val Tyr His Ile Val | | |
| 65 | 70 | 75 80 |
| Ser Leu Cys Val Ala Asn Ser Val Gly Ser Lys Ser Ser His Asn Glu | | |
| | 85 | 90 95 |
| Ala Phe His Ser Leu Lys Met Val Gln Pro Asp Pro Pro Ala Asn Leu | | |
| | 100 | 105 110 |
| Val Val Ser Ala Ile Pro Gly Arg Arg Trp Leu Lys Val Ser Trp Gln | | |
| | 115 | 120 125 |

His Pro Glu Thr Trp Asp Pro Ser Tyr Tyr Leu Leu Gln Phe Gln Leu
 130 135 140

Arg Tyr Arg Pro Val Trp Ser Lys Glu Phe Thr Val Leu Leu Leu Pro
 145 150 155 160

Val Ala Gln Tyr Gln Cys Val Ile His Asp Ala Leu Arg Gly Val Lys
 165 170 175

His Val Val Gln Val Arg Gly Lys Glu Glu Leu Asp Leu Gly Gln Trp
 180 185 190

Ser Glu Trp Ser Pro Glu Val Thr Gly Thr Pro Trp Ile
 195 200 205

<210> 19
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 19

Gly Asn Met Lys Val Leu Gln Glu Pro Thr Cys Val Ser Asp Tyr Met
 1 5 10 15

Ser Ile Ser Thr Cys Glu Trp Lys Met Asn Gly Pro Thr Asn Cys Ser
 20 25 30

Thr Glu Leu Arg Leu Leu Tyr Gln Leu Val Phe Leu Leu Ser Glu Ala
 35 40 45

His Thr Cys Ile Pro Glu Asn Asn Gly Gly Ala Gly Cys Val Cys His
 50 55 60

Leu Leu Met Asp Asp Val Val Ser Ala Asp Asn Tyr Thr Leu Asp Leu
 65 70 75 80

Trp Ala Gly Gln Gln Leu Leu Trp Lys Gly Ser Phe Lys Pro Ser Glu
 85 90 95

His Val Lys Pro Arg Ala Pro Gly Asn Leu Thr Val His Thr Asn Val
 100 105 110

Ser Asp Thr Leu Leu Leu Thr Trp Ser Asn Pro Tyr Pro Pro Asp Asn
 115 120 125

Tyr Leu Tyr Asn His Leu Thr Tyr Ala Val Asn Ile Trp Ser Glu Asn
130 135 140

Asp Pro Ala Asp Phe Arg Ile Tyr Asn Val Thr Tyr Leu Glu Pro Ser
145 150 155 160

Leu Arg Ile Ala Ala Ser Thr Leu Lys Ser Gly Ile Ser Tyr Arg Ala
165 170 175

Arg Val Arg Ala Trp Ala Gln Cys Tyr Asn Thr Thr Trp Ser Glu Trp
180 185 190

Ser Pro Ser Thr Lys Trp His Asn Ser
195 200

<210> 20
<211> 202
<212> PRT
<213> Mus musculus

<400> 20

Gly Ser Ile Lys Val Leu Gly Glu Pro Thr Cys Phe Ser Asp Tyr Ile
1 5 10 15

Arg Thr Ser Thr Cys Glu Trp Phe Leu Asp Ser Ala Val Asp Cys Ser
20 25 30

Ser Gln Leu Cys Leu His Tyr Arg Leu Met Phe Phe Glu Phe Ser Glu
35 40 45

Asn Leu Thr Cys Ile Pro Arg Asn Ser Ala Ser Thr Val Cys Val Cys
50 55 60

His Met Glu Met Asn Arg Pro Val Gln Ser Asp Arg Tyr Gln Met Glu
65 70 75 80

Leu Trp Ala Glu His Arg Gln Leu Trp Gln Gly Ser Phe Ser Pro Ser
85 90 95

Gly Asn Val Lys Pro Leu Ala Pro Asp Asn Leu Thr Leu His Thr Asn
100 105 110

Val Ser Asp Glu Trp Leu Leu Thr Trp Asn Asn Leu Tyr Pro Ser Asn
115 120 125

Asn Leu Leu Tyr Lys Asp Leu Ile Ser Met Val Asn Ile Ser Arg Glu
130 135 140

Asp Asn Pro Ala Glu Phe Ile Val Tyr Asn Val Thr Tyr Lys Glu Pro
 145 150 155 160

Arg Leu Ser Phe Pro Ile Asn Ile Leu Met Ser Gly Val Tyr Tyr Thr
 165 170 175

Ala Arg Val Arg Val Arg Ser Gln Ile Leu Thr Gly Thr Trp Ser Glu
 180 185 190

Trp Ser Pro Ser Ile Thr Trp Tyr Asn His
 195 200

<210> 21
 <211> 204
 <212> PRT
 <213> Homo sapiens

<400> 21

Gly Gln Leu Pro Pro Gly Lys Pro Glu Glu Ile Phe Lys Cys Arg Ser
 1 5 10 15

Pro Asn Lys Glu Thr Phe Thr Cys Trp Trp Arg Pro Gly Thr Asp Gly
 20 25 30

Gly Leu Pro Thr Asn Tyr Ser Leu Thr Tyr His Arg Glu Gly Glu Thr
 35 40 45

Leu Met His Glu Cys Pro Asp Tyr Ile Thr Gly Gly Pro Asn Ser Cys
 50 55 60

His Phe Gly Lys Gln Tyr Thr Ser Met Trp Arg Thr Tyr Ile Met Met
 65 70 75 80

Val Asn Ala Thr Asn Gln Met Gly Ser Ser Phe Ser Asp Glu Leu Tyr
 85 90 95

Val Asp Val Thr Tyr Ile Val Gln Pro Asp Pro Pro Leu Glu Leu Ala
 100 105 110

Val Glu Val Lys Gln Pro Glu Pro Tyr Leu Trp Ile Lys Trp Ser Pro
 115 120 125

Pro Thr Leu Ile Asp Leu Lys Thr Gly Trp Phe Thr Leu Leu Tyr Glu
 130 135 140

Ile Arg Leu Lys Pro Glu Lys Ala Ala Glu Trp Glu Ile His Phe Ala
 145 150 155 160

Gly Gln Gln Thr Glu Phe Lys Ile Leu Ser Leu His Pro Gly Gln Lys
 165 170 175

Tyr Leu Val Gln Val Arg Cys Lys Pro Asp His Gly Tyr Trp Ser Ala
 180 185 190

Trp Ser Pro Ala Thr Phe Ile Gln Ile Pro Ser Asp
 195 200

<210> 22
 <211> 203
 <212> PRT
 <213> Mus musculus

<400>..22

Gly Gln Ser Pro Pro Gly Lys Pro Glu Ile His Lys Cys Arg Ser Pro
 1 5 10 15

Asp Lys Glu Thr Phe Thr Cys Trp Trp Asn Pro Gly Ser Asp Gly Gly
 20 25 30

Leu Pro Thr Asn Tyr Ser Leu Thr Tyr Ser Lys Glu Gly Glu Lys Asn
 35 40 45

Thr Tyr Glu Cys Pro Asp Tyr Lys Thr Ser Gly Pro Asn Ser Cys Phe
 50 55 60

Phe Ser Lys Gln Tyr Thr Ser Ile Trp Lys Ile Tyr Ile Ile Thr Val
 65 70 75 80

Asn Ala Thr Asn Glu Met Gly Ser Ser Thr Ser Asp Pro Leu Tyr Val
 85 90 95

Asp Val Thr Tyr Ile Val Glu Pro Glu Pro Pro Arg Asn Leu Thr Leu
 100 105 110

Glu Val Lys Gln Leu Lys Thr Tyr Leu Trp Val Lys Trp Leu Pro Pro
 115 120 125

Thr Ile Thr Asp Val Lys Thr Gly Trp Phe Thr Met Glu Tyr Glu Ile
 130 135 140

Arg Leu Lys Ser Glu Glu Ala Asp Glu Trp Glu Ile His Phe Thr Gly
 145 150 155 160

His Gln Thr Gln Phe Lys Val Phe Asp Leu Tyr Pro Gly Gln Lys Tyr
165 170 175

Leu Val Gln Thr Arg Cys Lys Pro Asp His Gly Tyr Trp Ser Arg Trp
180 185 190

Gly Gln Glu Lys Ser Ile Glu Ile Pro Asn Asp
195 200

<210> 23
<211> 208
<212> PRT
<213> Homo sapiens

<400> 23

Leu Pro Pro Glu Lys Pro Val Asn Ile Ser Cys Trp Ser Lys Asn Met
1 5 10 15

Lys Asp Leu Thr Cys Arg Trp Thr Pro Gly Ala His Gly Glu Thr Phe
20 25 30

Leu His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu Arg Trp Tyr Gly Gln
35 40 45

Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly Pro His Ser Cys His
50 55 60

Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr Glu Ile Trp Val Glu
65 70 75 80

Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp Val Leu Thr Leu Asp
85 90 95

Ile Leu Asp Val Val Thr Thr Asp Pro Pro Pro Asp Val His Val Ser
100 105 110

Arg Val Gly Gly Asp Gln Leu Ser Val Arg Trp Val Ser Pro Pro Ala
115 120 125

Leu Lys Asp Phe Leu Phe Gln Ala Lys Tyr Gln Ile Arg Tyr Arg Val
130 135 140

Glu Asp Ser Val Asp Trp Lys Val Val Asp Asp Val Ser Asn Gln Thr
145 150 155 160

Ser Cys Arg Leu Ala Gly Leu Lys Pro Gly Thr Val Tyr Phe Val Gln
 165 170 175

Val Arg Cys Asn Pro Phe Gly Ile Tyr Gly Ser Lys Lys Ala Gly Ile
 180 185 190

Trp Ser Glu Trp Ser His Pro Thr Ala Ala Ser Thr Pro Arg Ser Glu
 195 200 205

<210> 24
 <211> 208
 <212> PRT
 <213> Mus musculus

<400> 24

Leu Pro Pro Glu Lys Pro Phe Asn Ile Ser Cys Trp Ser Arg Asn Met
 1 5 10 15

Lys Asp Leu Thr Cys Arg Trp Thr Pro Gly Ala His Gly Glu Thr Phe
 20 25 30

Leu His Thr Asn Tyr Ser Leu Lys Tyr Lys Leu Arg Trp Tyr Gly Gln
 35 40 45

Asp Asn Thr Cys Glu Glu Tyr His Thr Val Gly Pro His Ser Cys His
 50 55 60

Ile Pro Lys Asp Leu Ala Leu Phe Thr Pro Tyr Glu Ile Trp Val Glu
 65 70 75 80

Ala Thr Asn Arg Leu Gly Ser Ala Arg Ser Asp Val Leu Thr Leu Asp
 85 90 95

Val Leu Asp Val Val Thr Thr Asp Pro Pro Pro Asp Val His Val Ser
 100 105 110

Arg Val Gly Gly Asp Gln Leu Ser Val Arg Trp Val Ser Pro Pro Ala
 115 120 125

Leu Lys Asp Phe Leu Phe Gln Ala Lys Tyr Gln Ile Arg Tyr Arg Val
 130 135 140

Glu Asp Ser Val Asp Trp Lys Val Val Asp Asp Val Ser Asn Gln Thr
 145 150 155 160

Ser Cys Arg Leu Ala Gly Leu Lys Pro Gly Thr Val Tyr Phe Val Gln
 165 170 175

Val Arg Cys Asn Pro Phe Gly Ile Tyr Gly Ser Lys Lys Ala Gly Ile
180 185 190

Trp Ser Glu Trp Ser His Pro Thr Ala Ala Ser Thr Pro Arg Ser Glu
195 200 205

<210> 25
<211> 198
<212> PRT
<213> Homo sapiens

<400> 25

Val Ala Pro Glu Gln Pro Gln Asn Leu Ser Cys Ile Gln Lys Gly Glu
1 5 10 15

Gln Gly Thr Val Ala Cys Thr Trp Glu Arg Gly Arg Asp Thr His Leu
20 25 30

Tyr Thr Glu Tyr Thr Leu Gln Leu Ser Gly Pro Lys Asn Leu Thr Trp
35 40 45

Gln Lys Gln Cys Lys Asp Ile Tyr Cys Asp Tyr Leu Asp Phe Gly Ile
50 55 60

Asn Leu Thr Pro Glu Ser Pro Glu Ser Asn Phe Thr Ala Lys Val Thr
65 70 75 80

Ala Val Asn Ser Leu Gly Ser Ser Ser Ser Leu Pro Ser Thr Phe Thr
85 90 95

Phe Leu Asp Ile Val Arg Pro Leu Pro Pro Trp Asp Ile Arg Ile Lys
100 105 110

Phe Gln Lys Ala Ser Ser Arg Cys Thr Leu Tyr Trp Arg Asp Glu Gly
115 120 125

Leu Val Leu Leu Asn Arg Leu Arg Tyr Arg Pro Ser Asn Ser Arg Leu
130 135 140

Trp Asn Met Val Asn Val Thr Lys Ala Lys Gly Arg His Asp Leu Leu
145 150 155 160

Asp Leu Lys Pro Phe Thr Glu Tyr Glu Phe Gln Ile Ser Ser Lys Leu
165 170 175

His Leu Tyr Lys Gly Ser Trp Ser Asp Trp Ser Glu Ser Leu Arg Ala
180 185 190

Gln Thr Pro Glu Glu Glu
195

<210> 26
<211> 201
<212> PRT
<213> Mus musculus

<400> 26

Val Ala Pro Glu Pro Pro Gln Asn Ile Ser Cys Val Gln Glu Gly Glu
1 5 10 15

Asn Gly Thr Val Ala Cys Ser Trp Asn Ser Gly Lys Val Thr Tyr Leu
20 25 30

Lys Thr Asn Tyr Thr Leu Gln Leu Ser Gly Pro Asn Asn Leu Thr Cys
35 40 45

Gln Lys Gln Cys Phe Ser Asp Asn Arg Gln Asn Cys Asn Arg Leu Asp
50 55 60

Leu Gly Ile Asn Leu Ser Pro Asp Leu Ala Glu Ser Arg Phe Ile Val
65 70 75 80

Arg Val Thr Ala Ile Asn Asp Leu Gly Asn Ser Ser Ser Leu Pro His
85 90 95

Thr Phe Thr Phe Leu Asp Ile Val Ile Pro Leu Pro Pro Trp Asp Ile
100 105 110

Arg Ile Asn Phe Leu Asn Ala Ser Ser Arg Gly Thr Leu Gln Trp Glu
115 120 125

Asp Glu Gly Gln Val Val Leu Asn Gln Leu Arg Tyr Gln Pro Leu Asn
130 135 140

Ser Thr Ser Trp Asn Met Val Asn Ala Thr Asn Ala Lys Gly Lys Tyr
145 150 155 160

Asp Leu Arg Asp Leu Arg Pro Phe Thr Glu Tyr Glu Phe Gln Ile Ser
165 170 175

Ser Lys Leu His Leu Ser Gly Gly Ser Trp Ser Asn Trp Ser Glu Ser
180 185 190

Leu Arg Thr Arg Thr Pro Glu Glu Glu
 195 200

<210> 27
 <211> 208
 <212> PRT
 <213> Homo sapiens

<400> 27

Tyr Pro Pro Ala Arg Pro Val Val Ser Cys Gln Ala Ala Asp Tyr Glu
 1 5 10 15

Asn Phe Ser Cys Thr Trp Ser Pro Ser Gln Ile Ser Gly Leu Pro Thr
 20 25 30

Arg Tyr Leu Thr Ser Tyr Arg Lys Lys Thr Val Leu Gly Ala Asp Ser
 35 40 45

Gln Arg Arg Ser Pro Ser Thr Gly Pro Trp Pro Cys Pro Gln Asp Pro
 50 55 60

Leu Gly Ala Ala Arg Cys Val Val His Gly Ala Glu Phe Trp Ser Gln
 65 70 75 80

Tyr Arg Ile Asn Val Thr Glu Val Asn Pro Leu Gly Ala Ser Thr Arg
 85 90 95

Leu Leu Asp Val Ser Leu Gln Ser Ile Leu Arg Pro Asp Pro Pro Gln
 100 105 110

Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro Arg Arg Leu Arg Ala
 115 120 125

Ser Trp Thr Tyr Pro Ala Ser Trp Pro Cys Gln Pro His Phe Leu Leu
 130 135 140

Lys Phe Arg Leu Gln Tyr Arg Pro Ala Gln His Pro Ala Trp Ser Thr
 145 150 155 160

Val Glu Pro Ala Gly Leu Glu Glu Val Ile Thr Asp Ala Val Ala Gly
 165 170 175

Leu Pro His Ala Val Arg Val Ser Ala Arg Asp Phe Leu Asp Ala Gly
 180 185 190

Thr Trp Ser Thr Trp Ser Pro Glu Ala Trp Gly Thr Pro Ser Thr Gly
 195 200 205

<210> 28
 <211> 208
 <212> PRT
 <213> Mus musculus

<400> 28

Phe Pro Pro Ala Arg Pro Glu Val Ser Cys Gln Ala Val Asp Tyr Glu
 1 5 10 15

Asn Phe Ser Cys Thr Trp Ser Pro Gly Gln Val Ser Gly Leu Pro Thr
 20 25 30

Arg Tyr Leu Thr Ser Tyr Arg Lys Lys Thr Leu Pro Gly Ala Glu Ser
 35 40 45

Gln Arg Glu Ser Pro Ser Thr Gly Pro Trp Pro Cys Pro Gln Asp Pro
 50 55 60

Leu Glu Ala Ser Arg Cys Val Val His Gly Ala Glu Phe Trp Ser Glu
 65 70 75 80

Tyr Arg Ile Asn Val Thr Glu Val Asn Pro Leu Gly Ala Ser Thr Cys
 85 90 95

Leu Leu Asp Val Arg Leu Gln Ser Ile Leu Arg Pro Asp Pro Pro Gln
 100 105 110

Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro Arg Arg Leu His Ala
 115 120 125

Ser Trp Thr Tyr Pro Ala Ser Trp Arg Arg Gln Pro His Phe Leu Leu
 130 135 140

Lys Phe Arg Leu Gln Tyr Arg Pro Ala Gln His Pro Ala Trp Ser Thr
 145 150 155 160

Val Glu Pro Ile Gly Leu Glu Glu Val Ile Thr Asp Ala Val Ala Gly
 165 170 175

Leu Pro His Ala Val Arg Val Ser Ala Arg Asp Phe Leu Asp Ala Gly
 180 185 190

Thr Trp Ser Ala Trp Ser Pro Glu Ala Trp Gly Thr Pro Ser Thr Gly
 195 200 205

<210> 29
 <211> 208
 <212> PRT
 <213> Mus musculus

<400> 29

Phe Pro Pro Ala Arg Pro Glu Val Ser Cys Gln Ala Val Asp Tyr Glu
 1 5 10 15

Asn Phe Ser Cys Thr Trp Ser Pro Gly Gln Val Ser Gly Leu Pro Thr
 20 25 30

Arg Tyr Leu Thr Ser Tyr Arg Lys Lys Thr Leu Pro Gly Ala Glu Ser
 35 40 45

Gln Arg Glu Ser Pro Ser Thr Gly Pro Trp Pro Cys Pro Gln Asp Pro
 50 55 60

Leu Glu Ala Ser Arg Cys Val Val His Gly Ala Glu Phe Trp Ser Glu
 65 70 75 80

Tyr Arg Ile Asn Val Thr Glu Val Asn Ser Leu Gly Ala Ser Thr Cys
 85 90 95

Leu Leu Asp Val Arg Leu Gln Ser Ile Leu Arg Pro Asp Pro Pro Gln
 100 105 110

Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro Arg Arg Leu His Ala
 115 120 125

Ser Trp Thr Tyr Pro Ala Ser Trp Arg Arg Gln Pro His Phe Leu Leu
 130 135 140

Lys Phe Arg Leu Gln Tyr Arg Pro Ala Gln His Pro Ala Trp Ser Thr
 145 150 155 160

Val Glu Pro Ile Gly Leu Glu Glu Val Ile Thr Asp Thr Val Ala Gly
 165 170 175

Leu Pro His Ala Val Arg Val Ser Ala Arg Asp Phe Leu Asp Ala Gly
 180 185 190

Thr Trp Ser Ala Trp Ser Pro Glu Ala Trp Gly Thr Pro Ser Thr Gly
 195 200 205

<210> 30
 <211> 208
 <212> PRT
 <213> Homo sapiens

<400> 30

Leu Pro Pro Arg Glu Pro Val Leu Ser Cys Arg Ser Asn Thr Tyr Pro
 1 5 10 15

Lys Gly Phe Tyr Cys Ser Trp His Leu Pro Thr Pro Thr Tyr Ile Pro
 20 25 30

Asn Thr Phe Asn Val Thr Val Leu His Gly Ser Lys Ile Met Val Cys
 35 40 45

Glu Lys Asp Pro Ala Leu Lys Asn Arg Cys His Ile Arg Tyr Met His
 50 55 60

Leu Phe Ser Thr Ile Lys Tyr Lys Val Ser Ile Ser Val Ser Asn Ala
 65 70 75 80

Leu Gly His Asn Ala Thr Ala Ile Thr Phe Asp Glu Phe Thr Ile Val
 85 90 95

Lys Pro Asp Pro Pro Glu Asn Val Val Ala Arg Pro Val Pro Ser Asn
 100 105 110

Arg Arg Leu Glu Val Thr Trp Gln Thr Pro Ser Thr Trp Pro Asp Pro
 115 120 125

Glu Ser Phe Pro Leu Lys Phe Phe Leu Arg Tyr Arg Pro Leu Ile Leu
 130 135 140

Asp Gln Trp Gln His Val Glu Leu Ser Asp Gly Thr Ala His Thr Ile
 145 150 155 160

Thr Asp Ala Tyr Ala Gly Lys Glu Tyr Ile Ile Gln Val Ala Ala Lys
 165 170 175

Asp Asn Glu Ile Gly Thr Trp Ser Asp Trp Ser Val Ala Ala His Ala
 180 185 190

Thr Pro Trp Thr Glu Glu Pro Arg His Leu Thr Thr Glu Ala Gln Ala
 195 200 205

<210> 31

<211> 207
 <212> PRT
 <213> Mus musculus

<400> 31

Leu Pro Pro Arg Glu Pro Val Leu Ser Cys Arg Ser Asn Thr Tyr Pro
 1 5 10 15

Lys Gly Phe Tyr Cys Ser Trp His Leu Pro Thr Pro Thr Tyr Ile Pro
 20 25 30

Asn Thr Phe Asn Val Thr Val Leu His Gly Ser Lys Ile Met Val Cys
 35 40 45

Glu Lys Asp Pro Ala Leu Lys Asn Arg Cys His Ile Arg Tyr Met His
 50 55 60

Leu Phe Ser Thr Ile Lys Tyr Lys Val Ser Ile Ser Val Ser Asn Ala
 65 70 75 80

Leu Gly His Asn Thr Thr Ala Ile Thr Phe Asp Glu Phe Thr Ile Val
 85 90 95

Lys Pro Asp Pro Pro Glu Asn Val Val Ala Arg Pro Val Ser Asn Arg
 100 105 110

Arg Leu Glu Val Thr Trp Gln Thr Pro Ser Thr Trp Pro Asp Pro Glu
 115 120 125

Ser Phe Pro Leu Lys Phe Phe Leu Arg Tyr Arg Pro Leu Ile Leu Asp
 130 135 140

Gln Trp Gln His Val Glu Leu Ser Asp Gly Thr Ala His Thr Ile Thr
 145 150 155 160

Asp Ala Tyr Ala Gly Lys Glu Tyr Ile Ile Gln Val Ala Ala Lys Asp
 165 170 175

Asn Glu Ile Gly Thr Trp Ser Asp Trp Ser Val Ala Ala His Ala Thr
 180 185 190

Pro Trp Thr Glu Glu Pro Arg His Leu Thr Thr Glu Ala Gln Ala
 195 200 205

<210> 32
 <211> 207
 <212> PRT

<213> Homo sapiens

<400> 32

Gly Pro Pro Ala Ala Leu Thr Leu Pro Arg Val Gln Cys Arg Ala Ser
1 5 10 15

Arg Tyr Pro Ile Ala Val Asp Cys Ser Trp Thr Leu Pro Pro Ala Pro
20 25 30

Asn Ser Thr Ser Pro Val Ser Phe Ile Ala Thr Tyr Arg Leu Gly Met
35 40 45

Ala Ala Arg Gly His Ser Trp Pro Cys Leu Gln Gln Thr Pro Thr Ser
50 55 60

Thr Ser Cys Thr Ile Thr Asp Val Gln Leu Phe Ser Met Ala Pro Tyr
65 70 75 80

Val Leu Asn Val Thr Ala Val His Pro Trp Gly Ser Ser Ser Ser Phe
85 90 95

Val Pro Phe Ile Thr Glu His Ile Ile Lys Pro Asp Pro Pro Glu Gly
100 105 110

Val Arg Leu Ser Pro Leu Ala Glu Arg Gln Leu Gln Val Gln Trp Glu
115 120 125

Pro Pro Gly Ser Trp Pro Phe Pro Glu Ile Phe Ser Leu Lys Tyr Trp
130 135 140

Ile Arg Tyr Lys Arg Gln Gly Ala Ala Arg Phe His Arg Val Gly Pro
145 150 155 160

Ile Glu Ala Thr Ser Phe Ile Leu Arg Ala Val Arg Pro Arg Ala Arg
165 170 175

Tyr Tyr Val Gln Val Ala Ala Gln Asp Leu Thr Asp Tyr Gly Glu Leu
180 185 190

Ser Asp Trp Ser Leu Pro Ala Thr Ala Thr Met Ser Leu Gly Lys
195 200 205

<210> 33

<211> 206

<212> PRT

<213> Mus musculus

<400> 33

Ala Leu Val Ala Leu Ser Gln Pro Arg Val Gln Cys His Ala Ser Arg
1 5 10 15

Tyr Pro Val Ala Val Asp Cys Ser Trp Thr Pro Leu Gln Ala Pro Asn
20 25 30

Ser Thr Arg Ser Thr Ser Phe Ile Ala Thr Tyr Arg Leu Gly Val Ala
35 40 45

Thr Gln Gln Gln Ser Gln Pro Cys Leu Gln Arg Ser Pro Gln Ala Ser
50 55 60

Arg Cys Thr Ile Pro Asp Val His Leu Phe Ser Thr Val Pro Tyr Met
65 70 75 80

Leu Asn Val Thr Ala Val His Pro Gly Gly Ala Ser Ser Ser Leu Leu
85 90 95

Ala Phe Val Ala Glu Arg Ile Ile Lys Pro Asp Pro Pro Glu Gly Val
100 105 110

Arg Leu Arg Thr Ala Gly Gln Arg Leu Gln Val Leu Trp His Pro Pro
115 120 125

Ala Ser Trp Pro Phe Pro Asp Ile Phe Ser Leu Lys Tyr Arg Leu Arg
130 135 140

Tyr Arg Arg Arg Gly Ala Ser His Phe Arg Gln Val Gly Pro Ile Glu
145 150 155 160

Ala Thr Thr Phe Thr Leu Arg Asn Ser Lys Pro His Ala Lys Tyr Cys
165 170 175

Ile Gln Val Ser Ala Gln Asp Leu Thr Asp Tyr Gly Lys Pro Ser Asp
180 185 190

Trp Ser Leu Pro Gly Gln Val Glu Ser Ala Pro His Lys Pro
195 200 205

<210> 34

<211> 259

<212> PRT

<213> Homo sapiens

<400> 34

Asp Val Ser Leu Leu Ala Ser Asp Ser Glu Pro Leu Lys Cys Phe Ser
 1 5 10 15
 Arg Thr Phe Glu Asp Leu Thr Cys Phe Trp Asp Glu Glu Glu Ala Ala
 20 25 30
 Pro Ser Gly Thr Tyr Gln Leu Leu Tyr Ala Tyr Pro Arg Glu Lys Pro
 35 40 45
 Arg Ala Cys Pro Leu Ser Ser Gln Ser Met Pro His Phe Gly Thr Arg
 50 55 60
 Tyr Val Cys Gln Phe Pro Asp Gln Glu Glu Val Arg Leu Phe Phe Pro
 65 70 75 80
 Leu His Leu Trp Val Lys Asn Val Phe Leu Asn Gln Thr Arg Thr Gln
 85 90 95
 Arg Val Leu Phe Val Asp Ser Val Gly Leu Pro Ala Pro Pro Ser Ile
 100 105 110
 Ile Lys Ala Met Gly Gly Ser Gln Pro Gly Glu Leu Gln Ile Ser Trp
 115 120 125
 Glu Glu Pro Ala Pro Glu Thr Ser Asp Phe Leu Arg Tyr Glu Leu Arg
 130 135 140
 Tyr Gly Pro Arg Asp Pro Lys Asn Ser Thr Gly Pro Thr Val Ile Gln
 145 150 155 160
 Leu Ile Ala Thr Glu Thr Cys Cys Pro Ala Leu Gln Arg Pro His Ser
 165 170 175
 Ala Ser Ala Leu Asp Gln Ser Pro Cys Ala Gln Pro Thr Met Pro Trp
 180 185 190
 Gln Asp Gly Pro Lys Gln Thr Ser Pro Ser Arg Glu Ala Ser Ala Leu
 195 200 205
 Thr Ala Glu Gly Gly Ser Cys Leu Ile Ser Gly Leu Gln Pro Gly Asn
 210 215 220
 Ser Tyr Trp Leu Gln Leu Arg Ser Glu Pro Asp Gly Ile Ser Leu Gly
 225 230 235 240
 Gly Ser Trp Gly Ser Trp Ser Leu Pro Val Thr Val Asp Leu Pro Gly

Asp Ala Val

<210> 35
 <211> 251
 <212> PRT
 <213> Mus musculus
 <400> 35

Asp Val Phe Leu Leu Ala Leu Gly Thr Glu Pro Leu Asn Cys Phe Ser
 1 5 10 15

Gln Thr Phe Glu Asp Leu Thr Cys Phe Trp Asp Glu Glu Glu Ala Ala
 20 25 30

Pro Ser Gly Thr Tyr Gln Leu Leu Tyr Ala Tyr Arg Gly Glu Lys Pro
 35 40 45

Arg Ala Cys Pro Leu Tyr Ser Gln Ser Val Pro Thr Phe Gly Thr Arg
 50 55 60

Tyr Val Cys Gln Phe Pro Ala Gln Asp Glu Val Arg Leu Phe Phe Pro
 65 70 75 80

Leu His Leu Trp Val Lys Asn Val Ser Leu Asn Gln Thr Leu Ile Gln
 85 90 95

Arg Val Leu Phe Val Asp Ser Val Gly Leu Pro Ala Pro Pro Arg Val
 100 105 110

Ile Lys Ala Arg Gly Gly Ser Gln Pro Gly Glu Leu Gln Ile His Trp
 115 120 125

Glu Ala Pro Ala Pro Glu Ile Ser Asp Phe Leu Arg His Glu Leu Arg
 130 135 140

Tyr Gly Pro Thr Asp Ser Ser Asn Ala Thr Ala Pro Ser Val Ile Gln
 145 150 155 160

Leu Leu Ser Thr Glu Thr Cys Cys Pro Thr Leu Trp Met Pro Asn Pro
 165 170 175

Val Pro Val Leu Asp Gln Pro Pro Cys Val His Pro Thr Ala Ser Gln
 180 185 190

Pro His Gly Pro Ala Pro Phe Leu Thr Val Lys Gly Gly Ser Cys Leu
 195 200 205

Val Ser Gly Leu Gln Ala Ser Lys Ser Tyr Trp Leu Gln Leu Arg Ser
 210 215 220

Gln Pro Asp Gly Val Ser Leu Arg Gly Ser Trp Gly Pro Trp Ser Phe
 225 230 235 240

Pro Val Thr Val Asp Leu Pro Gly Asp Ala Val
 245 250

<210> 36
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 36

Asp Val Asn Ile Asn Ile Ser Cys Glu Thr Asp Gly Tyr Leu Thr Lys
 1 5 10 15

Met Thr Cys Arg Trp Ser Thr Ser Thr Ile Gln Ser Leu Ala Glu Ser
 20 25 30

Thr Leu Gln Leu Arg Tyr His Arg Ser Ser Leu Tyr Cys Ser Asp Ile
 35 40 45

Pro Ser Ile His Pro Ile Ser Glu Pro Lys Asp Cys Tyr Leu Gln Ser
 50 55 60

Asp Gly Phe Tyr Glu Cys Ile Phe Gln Pro Ile Phe Leu Leu Ser Gly
 65 70 75 80

Tyr Thr Met Trp Ile Arg Ile Asn His Ser Leu Gly Ser Leu Asp Ser
 85 90 95

Pro Pro Thr Cys Val Leu Pro Asp Ser Val Val Lys Pro Leu Pro Pro
 100 105 110

Ser Ser Val Lys Ala Glu Ile Thr Ile Asn Gly Leu Leu Lys Ile Ser
 115 120 125

Trp Glu Lys Pro Val Phe Pro Glu Asn Asn Leu Gln Phe Gln Ile Arg
 130 135 140

Tyr Gly Leu Ser Gly Lys Glu Val Gln Trp Lys Met Tyr Glu Val Tyr

145 150 155 160

Asp Ala Lys Ser Lys Ser Val Ser Leu Pro Val Pro Asp Leu Cys Ala
165 170 175

Val Tyr Ala Val Gln Val Arg Cys Lys Arg Ile Asp Gly Leu Ser Tyr
180 185 190

Met Ser Asn Trp Ser Asn Pro Ala Tyr Thr Val Val Met Asp Ile Lys
195 200 205

Val

<210> 37
<211> 210
<212> PRT
<213> Mus musculus

<400> 37

Asp Val Asn Ile Asn Ile Ser Cys Glu Thr Asp Gly Tyr Leu Thr Lys
1 5 10 15

Met Thr Cys Arg Trp Ser Pro Ser Thr Ile Gln Ser Leu Val Gly Ser
20 25 30

Thr Val Gln Leu Arg Tyr His Arg Arg Ser Leu Tyr Cys Pro Asp Ser
35 40 45

Pro Ser Ile His Pro Thr Ser Glu Pro Lys Asn Cys Val Leu Gln Arg
50 55 60

Asp Gly Phe Tyr Glu Cys Val Phe Gln Pro Ile Phe Leu Leu Ser Gly
65 70 75 80

Tyr Thr Met Trp Ile Arg Ile Asn His Ser Leu Gly Ser Leu Asp Ser
85 90 95

Pro Pro Thr Cys Val Leu Pro Asp Ser Val Val Lys Pro Leu Pro Pro
100 105 110

Ser Asn Val Lys Ala Glu Ile Thr Val Asn Thr Gly Leu Leu Lys Val
115 120 125

Ser Trp Glu Lys Pro Val Phe Pro Glu Asn Asn Leu Gln Phe Gln Ile
130 135 140

Arg Tyr Gly Leu Ser Gly Lys Glu Ile Gln Trp Lys Thr His Glu Val
 145 150 155 160

Phe Asp Ala Lys Ser Lys Ser Ala Ser Leu Leu Val Ser Asp Leu Cys
 165 170 175

Ala Val Tyr Val Val Gln Val Arg Cys Arg Arg Leu Asp Gly Leu Gly
 180 185 190

Tyr Trp Ser Asn Trp Ser Ser Pro Ala Tyr Thr Leu Val Met Asp Val
 195 200 205

Lys Val
 210

<210> 38
 <211> 209
 <212> PRT
 <213> Homo sapiens
 <400> 38

Asp Ala Asn Trp Asn Ile Gln Cys Trp Leu Lys Gly Asp Leu Lys Leu
 1 5 10 15

Phe Ile Cys Tyr Val Glu Ser Leu Phe Lys Asn Leu Phe Arg Asn Tyr
 20 25 30

Asn Tyr Lys Val His Leu Leu Tyr Val Leu Pro Glu Val Leu Glu Asp
 35 40 45

Ser Pro Leu Val Pro Gln Lys Gly Ser Phe Gln Met Val His Cys Asn
 50 55 60

Cys Ser Val His Glu Cys Cys Glu Cys Leu Val Pro Val Pro Thr Ala
 65 70 75 80

Lys Leu Asn Asp Thr Leu Leu Met Cys Leu Lys Ile Thr Ser Gly Gly
 85 90 95

Val Ile Phe Gln Ser Pro Leu Met Ser Val Gln Pro Ile Asn Met Val
 100 105 110

Lys Pro Asp Pro Pro Leu Gly Leu His Met Glu Ile Thr Asp Asp Gly
 115 120 125

Asn Leu Lys Ile Ser Met Ser Ser Pro Pro Leu Val Pro Phe Pro Leu
 130 135 140

Gln Tyr Gln Val Lys Tyr Ser Glu Asn Ser Thr Thr Val Ile Arg Glu
 145 150 155 160

Ala Asp Lys Ile Val Ser Ala Thr Ser Leu Leu Val Asp Ser Ile Leu
 165 170 175

Pro Gly Ser Ser Tyr Glu Val Gln Val Arg Gly Lys Arg Leu Asp Gly
 180 185 190

Pro Gly Ile Trp Ser Asp Trp Ser Thr Pro Arg Val Phe Thr Thr Gln
 195 200 205

Asp

<210> 39
 <211> 207
 <212> PRT
 <213> Mus musculus

<400> 39

Gly Val Asn Trp Asp Ile Glu Cys Trp Met Lys Gly Asp Leu Thr Leu
 1 5 10 15

Phe Ile Cys His Met Glu Pro Leu Pro Lys Asn Pro Phe Lys Asn Tyr
 20 25 30

Asp Ser Lys Val His Leu Leu Tyr Asp Leu Pro Glu Val Ile Asp Asp
 35 40 45

Ser Pro Leu Pro Pro Leu Lys Asp Ser Phe Gln Thr Val Gln Cys Asn
 50 55 60

Cys Ser Leu Arg Gly Cys Glu Cys His Val Pro Val Pro Arg Ala Lys
 65 70 75 80

Leu Asn Tyr Ala Leu Leu Met Tyr Leu Glu Ile Thr Ser Ala Gly Val
 85 90 95

Ser Phe Gln Ser Pro Leu Met Ser Leu Gln Pro Met Leu Val Val Lys
 100 105 110

Pro Asp Pro Pro Leu Gly Leu His Met Glu Val Thr Asp Asp Gly Asn
 115 120 125

Leu Lys Leu Ser Trp Asp Ser Gln Thr Met Ala Pro Phe Pro Leu Gln
 130 135 140

Tyr Gln Val Lys Tyr Leu Glu Asn Ser Thr Ile Val Arg Glu Ala Ala
 145 150 155 160

Glu Ile Val Ser Ala Thr Ser Leu Ile Val Asp Ser Val Leu Pro Gly
 165 170 175

Ser Ser Tyr Glu Val Gln Val Arg Ser Lys Arg Leu Asp Gly Ser Gly
 180 185 190

Val Trp Ser Asp Trp Ser Ser Pro Gln Val Phe Thr Thr Gln Asp
 195 200 205

<210> 40
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 40

Gly Trp Gly Cys Pro Asp Leu Val Cys Tyr Thr Asp Tyr Leu Gln Thr
 1 5 10 15

Val Ile Cys Ile Leu Glu Met Trp Asn Leu His Pro Ser Thr Leu Thr
 20 25 30

Leu Thr Trp Gln Asp Gln Tyr Glu Glu Leu Lys Asp Glu Ala Thr Ser
 35 40 45

Cys Ser Leu His Arg Ser Ala His Asn Ala Thr His Ala Thr Tyr Thr
 50 55 60

Cys His Met Asp Val Phe His Phe Met Ala Asp Asp Ile Phe Ser Val
 65 70 75 80

Asn Ile Thr Asp Gln Ser Gly Asn Tyr Ser Gln Glu Cys Gly Ser Phe
 85 90 95

Leu Leu Ala Glu Ser Ile Lys Pro Ala Pro Pro Phe Asn Val Thr Val
 100 105 110

Thr Phe Ser Gly Gln Tyr Asn Ile Ser Trp Arg Ser Asp Tyr Glu Asp
 115 120 125

Pro Ala Phe Tyr Met Leu Lys Gly Lys Leu Gln Tyr Arg Asn Arg Gly
 130 135 140

Asp Pro Gln Ala Val Ser Pro Arg Arg Lys Leu Ile Ser Val Asp Ser
 145 150 155 160

Arg Ser Val Ser Leu Leu Pro Leu Glu Phe Arg Lys Asp Ser Ser Tyr
 165 170 175

Glu Leu Gln Val Arg Ala Gly Pro Met Pro Gly Ser Ser Tyr Gln Gly
 180 185 190

Thr Trp Ser Glu Trp Ser Asp Pro Val Ile Phe Gln Thr Gln Ser Glu
 195 200 205

Glu

<210> 41
 <211> 213
 <212> PRT
 <213> Mus musculus

<400> 41

Ala Trp Ser Cys Leu Asp Leu Thr Cys Tyr Thr Asp Tyr Leu Trp Thr
 1 5 10 15

Ile Thr Cys Val Leu Glu Thr Arg Ser Pro Asn Pro Ser Ile Leu Ser
 20 25 30

Leu Thr Trp Gln Asp Glu Tyr Glu Glu Leu Gln Asp Gln Glu Thr Phe
 35 40 45

Cys Ser Leu His Arg Ser Gly His Asn Thr Thr His Ile Trp Tyr Thr
 50 55 60

Cys His Met Arg Leu Ser Gln Phe Leu Ser Asp Glu Val Phe Ile Val
 65 70 75 80

Asn Val Thr Asp Gln Ser Gly Asn Asn Ser Gln Glu Cys Gly Ser Phe
 85 90 95

Val Leu Ala Glu Ser Ile Lys Pro Ala Pro Pro Leu Asn Val Thr Val
 100 105 110

Ala Phe Ser Gly Arg Tyr Asp Ile Ser Trp Asp Ser Ala Tyr Ser Glu

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Pro Ser Asn Tyr Val Leu Glu Gly Lys Leu Gln Tyr Glu Leu Gln Tyr | | |
| 130 | 135 | 140 |
| Arg Asn Leu Arg Asp Pro Tyr Ala Val Arg Pro Val Thr Lys Leu Ile | | |
| 145 | 150 | 155 |
| Ser Val Asp Ser Arg Asn Val Ser Leu Leu Pro Glu Glu Phe His Lys | | |
| | 165 | 170 |
| | | 175 |
| Asp Ser Ser Tyr Gln Leu Gln Val Arg Ala Ala Pro Gln Pro Gly Thr | | |
| | 180 | 185 |
| | | 190 |
| Ser Phe Arg Gly Thr Trp Ser Glu Trp Ser Asp Pro Val Ile Phe Gln | | |
| | 195 | 200 |
| | | 205 |
| Thr Gln Ala Gly Glu | | |
| 210 | | |
| <210> 42 | | |
| <211> 206 | | |
| <212> PRT | | |
| <213> Homo sapiens | | |
| <400> 42 | | |
| Val Ala Leu Gly Leu Gln Cys Phe Thr Leu Asp Leu Lys Asn Val Thr | | |
| 1 | 5 | 10 |
| | | 15 |
| Cys Gln Trp Gln Gln Gln Asp His Ala Ser Ser Gln Gly Phe Phe Tyr | | |
| | 20 | 25 |
| | | 30 |
| His Ser Arg Ala Arg Cys Cys Pro Arg Asp Arg Tyr Pro Ile Trp Glu | | |
| | 35 | 40 |
| | | 45 |
| Asn Cys Glu Glu Glu Glu Lys Thr Asn Pro Gly Leu Gln Thr Pro Gln | | |
| | 50 | 55 |
| | | 60 |
| Phe Ser Arg Cys His Phe Lys Ser Arg Asn Asp Ser Ile Ile His Ile | | |
| 65 | 70 | 75 |
| | | 80 |
| Leu Val Glu Val Thr Thr Ala Pro Gly Thr Val His Ser Tyr Leu Gly | | |
| | 85 | 90 |
| | | 95 |
| Ser Pro Phe Trp Ile His Gln Ala Val Arg Leu Pro Thr Pro Asn Leu | | |
| | 100 | 105 |
| | | 110 |

His Trp Arg Glu Ile Ser Ser Gly His Leu Glu Leu Glu Trp Gln His
 115 120 125

Pro Ser Ser Trp Ala Ala Gln Glu Thr Cys Tyr Gln Leu Arg Tyr Thr
 130 135 140

Gly Glu Gly His Gln Asp Trp Lys Val Leu Glu Pro Pro Leu Gly Ala
 145 150 155 160

Arg Gly Gly Thr Leu Glu Leu Arg Pro Arg Ser Arg Tyr Arg Leu Gln
 165 170 175

Leu Arg Ala Arg Leu Asn Gly Pro Thr Tyr Gln Gly Pro Trp Ser Ser
 180 185 190

Trp Ser Asp Pro Thr Arg Val Glu Thr Ala Thr Glu Thr Ala
 195 200 205

<210> 43
 <211> 205
 <212> PRT
 <213> Mus musculus

<400> 43

Val Thr Ile Gly Leu Gln Cys Phe Thr Leu Asp Leu Lys Met Val Thr
 1 5 10 15

Cys Gln Trp Gln Gln Gln Asp Arg Thr Ser Ser Gln Gly Phe Phe Arg
 20 25 30

His Ser Arg Thr Arg Cys Cys Pro Thr Asp Arg Asp Pro Thr Trp Glu
 35 40 45

Lys Cys Glu Glu Glu Glu Pro Arg Pro Gly Ser Gln Pro Ala Leu Val
 50 55 60

Ser Arg Cys His Phe Lys Ser Arg Asn Asp Ser Val Ile His Ile Leu
 65 70 75 80

Val Glu Val Thr Thr Ala Gln Gly Ala Val His Ser Tyr Leu Gly Ser
 85 90 95

Pro Phe Trp Ile His Gln Ala Val Leu Leu Pro Thr Pro Ser Leu His
 100 105 110

Trp Arg Glu Val Ser Ser Gly Arg Leu Glu Leu Glu Trp Gln His Gln
115 120 125

Ser Ser Asn Ala Ala Gln Glu Thr Cys Tyr Gln Leu Arg Tyr Thr Gly
130 135 140

Glu Gly His Gln Asp Trp Lys Val Leu Glu Pro Ser Leu Gly Ala Arg
145 150 155 160

Gly Gly Thr Leu Glu Leu Arg Pro Arg Ala Arg Tyr Ser Leu Gln Leu
165 170 175

Arg Ala Arg Leu Asn Gly Pro Thr Tyr Gln Gly Pro Trp Ser Ala Trp
180 185 190

Ser Pro Pro Ala Arg Val Ser Thr Gly Ser Glu Thr Ala
195 200 205

<210> 44
<211> 198
<212> PRT
<213> Homo sapiens

<400> 44

Gly Ser Ala Gly Pro Leu Gln Cys Tyr Gly Val Gly Pro Leu Gly Asp
1 5 10 15

Leu Asn Cys Ser Trp Glu Pro Leu Gly Asp Leu Gly Ala Pro Ser Glu
20 25 30

Leu His Leu Gln Ser Gln Lys Tyr Arg Ser Asn Lys Thr Gln Thr Val
35 40 45

Ala Val Ala Ala Gly Arg Ser Trp Val Ala Ile Pro Arg Glu Gln Leu
50 55 60

Thr Met Ser Asp Lys Leu Leu Val Trp Gly Thr Lys Ala Gly Gln Pro
65 70 75 80

Leu Trp Pro Pro Val Phe Val Asn Leu Glu Thr Gln Met Lys Pro Asn
85 90 95

Ala Pro Arg Leu Gly Pro Asp Val Asp Phe Ser Glu Asp Asp Leu Glu
100 105 110

Ala Thr Val His Trp Ala Pro Pro Thr Trp Pro Ser His Lys Val Leu
115 120 125

Ile Cys Gln Phe His Tyr Arg Arg Cys Gln Glu Ala Ala Trp Thr Leu
 130 135 140

Leu Glu Pro Glu Leu Lys Thr Ile Pro Leu Thr Pro Val Glu Ile Gln
 145 150 155 160

Asp Leu Glu Leu Ala Thr Gly Tyr Lys Val Tyr Gly Arg Cys Arg Met
 165 170 175

Glu Lys Glu Glu Asp Leu Trp Gly Glu Trp Ser Pro Ile Leu Ser Phe
 180 185 190

Gln Thr Pro Pro Ser Ala
 195

<210> 45
 <211> 198
 <212> PRT
 <213> Mus musculus

<400> 45

Gly Ser Pro Gly Pro Leu Gln Cys Tyr Ser Val Gly Pro Leu Gly Ile
 1 5 10 15

Leu Asn Cys Ser Trp Glu Pro Leu Gly Asp Leu Glu Thr Pro Pro Val
 20 25 30

Leu Tyr His Gln Ser Gln Lys Tyr His Pro Asn Arg Val Trp Glu Val
 35 40 45

Lys Val Pro Ser Lys Gln Ser Trp Val Thr Ile Pro Arg Glu Gln Phe
 50 55 60

Thr Met Ala Asp Lys Leu Leu Ile Trp Gly Thr Gln Lys Gly Arg Pro
 65 70 75 80

Leu Trp Ser Ser Val Ser Val Asn Leu Glu Thr Gln Met Lys Pro Asp
 85 90 95

Thr Pro Gln Ile Phe Ser Gln Val Asp Ile Ser Glu Glu Ala Thr Leu
 100 105 110

Glu Ala Thr Val Gln Trp Ala Pro Pro Val Trp Pro Pro Gln Lys Ala
 115 120 125

Leu Thr Cys Gln Phe Arg Tyr Lys Glu Cys Gln Ala Glu Ala Trp Thr
 130 135 140

Arg Leu Glu Pro Gln Leu Lys Thr Asp Gly Leu Thr Pro Val Glu Met
 145 150 155 160

Gln Asn Leu Glu Pro Gly Thr Cys Tyr Gln Val Ser Gly Arg Cys Gln
 165 170 175

Val Glu Asn Gly Tyr Pro Trp Gly Glu Trp Ser Ser Pro Leu Ser Phe
 180 185 190

Gln Thr Pro Phe Leu Asp
 195

<210> 46
 <211> 206
 <212> PRT
 <213> Homo sapiens

<400> 46

Gly Thr Ser Gln Phe Thr Cys Phe Tyr Asn Ser Arg Ala Asn Ile Ser
 1 5 10 15

Cys Val Trp Ser Gln Asp Gly Ala Leu Gln Asp Thr Ser Cys Gln Val
 20 25 30

His Ala Trp Pro Asp Arg Arg Arg Trp Asn Gln Thr Cys Glu Leu Leu
 35 40 45

Pro Val Ser Gln Ala Ser Trp Ala Cys Asn Leu Ile Leu Gly Ala Pro
 50 55 60

Asp Ser Gln Lys Leu Thr Thr Val Asp Ile Val Thr Leu Arg Val Leu
 65 70 75 80

Cys Arg Glu Gly Val Arg Trp Arg Val Met Ala Ile Gln Asp Phe Lys
 85 90 95

Pro Phe Glu Asn Leu Arg Leu Met Ala Pro Ile Ser Leu Gln Val Val
 100 105 110

His Val Glu Thr His Arg Cys Asn Ile Ser Trp Glu Ile Ser Gln Ala
 115 120 125

Ser His Tyr Phe Glu Arg His Leu Glu Phe Glu Ala Arg Thr Leu Ser

| | | | | |
|---|-----|-----|-----|---------|
| 130 | | 135 | | 140 |
| Pro Gly His Thr Trp Glu Glu Ala Pro Leu Leu Thr Leu Lys Gln Lys | | | | |
| 145 | | 150 | | 155 160 |
| Gln Glu Trp Ile Cys Leu Glu Thr Leu Thr Pro Asp Thr Gln Tyr Glu | | | | |
| | 165 | | 170 | 175 |
| Phe Gln Val Arg Val Lys Pro Leu Gln Gly Glu Phe Thr Thr Trp Ser | | | | |
| | 180 | | 185 | 190 |
| Pro Trp Ser Gln Pro Leu Ala Phe Arg Thr Lys Pro Ala Asp | | | | |
| | 195 | | 200 | 205 |
| <210> 47 | | | | |
| <211> 206 | | | | |
| <212> PRT | | | | |
| <213> Mus musculus | | | | |
| <400> 47 | | | | |
| Asn Cys Ser His Glu Cys Phe Tyr Asn Ser Arg Ala Asn Val Ser Cys | | | | |
| 1 | 5 | | 10 | 15 |
| Met Trp Ser His Glu Glu Ala Leu Asn Val Thr Thr Cys His Val His | | | | |
| | 20 | | 25 | 30 |
| Ala Lys Ser Asn Leu Arg His Trp Asn Lys Thr Cys Glu Leu Thr Leu | | | | |
| | 35 | | 40 | 45 |
| Val Arg Gln Ala Ser Trp Ala Cys Asn Leu Ile Leu Gly Ser Phe Pro | | | | |
| | 50 | | 55 | 60 |
| Glu Ser Gln Ser Leu Thr Ser Val Asp Leu Leu Asp Ile Asn Val Val | | | | |
| 65 | 70 | | 75 | 80 |
| Cys Trp Glu Glu Lys Gly Trp Arg Arg Val Lys Thr Cys Asp Phe His | | | | |
| | 85 | | 90 | 95 |
| Pro Phe Asp Asn Leu Arg Leu Val Ala Pro His Ser Leu Gln Val Leu | | | | |
| | 100 | | 105 | 110 |
| His Ile Asp Thr Gln Arg Cys Asn Ile Ser Trp Lys Val Ser Gln Val | | | | |
| | 115 | | 120 | 125 |
| Ser His Tyr Ile Glu Pro Tyr Leu Glu Phe Glu Ala Arg Arg Arg Leu | | | | |
| 130 | | 135 | | 140 |

Leu Gly His Ser Trp Glu Asp Ala Ser Val Leu Ser Leu Lys Gln Arg
 145 150 155 160

Gln Gln Trp Leu Phe Leu Glu Met Leu Ile Pro Ser Thr Ser Tyr Glu
 165 170 175

Val Gln Val Arg Val Lys Ala Gln Arg Asn Asn Thr Gly Thr Trp Ser
 180 185 190

Pro Trp Ser Gln Pro Leu Thr Phe Arg Thr Arg Pro Ala Asp
 195 200 205

<210> 48
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 48

Gly Pro Arg Ser Arg Thr Phe Thr Cys Leu Thr Asn Asn Ile Leu Arg
 1 5 10 15

Ile Asp Cys His Trp Ser Ala Pro Glu Leu Gly Gln Gly Ser Ser Pro
 20 25 30

Trp Leu Leu Phe Thr Ser Asn Gln Ala Pro Gly Gly Thr His Lys Cys
 35 40 45

Ile Leu Arg Gly Ser Glu Cys Thr Val Val Leu Pro Pro Glu Ala Val
 50 55 60

Leu Val Pro Ser Asp Asn Phe Thr Ile Thr Phe His His Cys Met Ser
 65 70 75 80

Gly Arg Glu Gln Val Ser Leu Val Asp Pro Glu Tyr Leu Pro Pro Arg
 85 90 95

His Val Lys Leu Asp Pro Pro Ser Asp Leu Gln Ser Asn Ile Ser Ser
 100 105 110

Gly His Cys Ile Leu Thr Trp Ser Ile Ser Pro Ala Leu Glu Pro Met
 115 120 125

Phe Thr Leu Leu Ser Tyr Glu Leu Ala Phe Lys Lys Gln Glu Glu Ala
 130 135 140

Trp Glu Gln Ala Gln His Arg Asp His Ile Val Gly Val Thr Trp Leu

145 150 155 160
 Ile Leu Glu Ala Phe Glu Leu Asp Pro Gly Phe Ile His Glu Ala Arg
 165 170 175
 Leu Arg Val Gln Met Ala Thr Leu Glu Asp Asp Val Val Glu Glu Glu
 180 185 190
 Arg Tyr Thr Gly Cys Gln Trp Ser Glu Trp Ser Gln Pro Val Cys Phe
 195 200 205
 Gln Ala Pro Gln Arg Gln Gly
 210 215

 <210> 49
 <211> 212
 <212> PRT
 <213> Mus musculus

 <400> 49

 Gly Gln Lys Ala Gly Ala Phe Thr Cys Leu Ser Asn Ser Ile Tyr Arg
 1 5 10 15

 Ile Asp Cys His Trp Ser Ala Pro Glu Leu Gly Gln Glu Ser Arg Ala
 20 25 30

 Trp Leu Leu Phe Thr Ser Asn Gln Val Thr Glu Ile Lys His Lys Cys
 35 40 45

 Thr Phe Trp Asp Ser Met Cys Thr Leu Val Leu Pro Lys Glu Glu Val
 50 55 60

 Phe Leu Pro Phe Asp Asn Phe Thr Ile Thr Leu His Arg Cys Ile Met
 65 70 75 80

 Gly Gln Glu Gln Val Ser Leu Val Asp Ser Gln Tyr Leu Pro Arg Arg
 85 90 95

 His Ile Lys Leu Asp Pro Pro Ser Asp Leu Gln Ser Asn Val Ser Ser
 100 105 110

 Gly Arg Cys Val Leu Thr Trp Gly Ile Asn Leu Ala Leu Glu Pro Leu
 115 120 125

 Ile Thr Ser Leu Ser Tyr Glu Leu Ala Phe Lys Arg Gln Glu Glu Ala
 130 135 140

Trp Glu Ala Arg His Asp Arg Ile Val Gly Val Thr Trp Leu Ile Leu
 145 150 155 160

Glu Ala Val Glu Leu Asn Pro Gly Ser Ile Tyr Glu Ala Arg Leu Arg
 165 170 175

Val Gln Met Thr Leu Glu Ser Tyr Lys Asp Lys Thr Glu Gly Glu Tyr
 180 185 190

Tyr Lys Ser His Trp Ser Glu Trp Ser Gln Pro Val Ser Phe Pro Gln
 195 200 205

Arg Arg Gln Gly
 210

<210> 50
 <211> 193
 <212> PRT
 <213> Homo sapiens

<400> 50

Gly Ser Ala Ser Gly Pro Arg Asp Leu Arg Cys Tyr Arg Ile Ser Ser
 1 5 10 15

Asp Arg Tyr Glu Cys Ser Trp Gln Tyr Glu Gly Pro Thr Ala Gly Val
 20 25 30

Ser His Phe Leu Arg Cys Cys Leu Ser Ser Gly Arg Cys Cys Tyr Phe
 35 40 45

Ala Ala Gly Ser Ala Thr Arg Leu Gln Phe Ser Asp Gln Ala Gly Val
 50 55 60

Ser Val Leu Tyr Thr Val Thr Leu Trp Val Glu Ser Trp Ala Arg Asn
 65 70 75 80

Gln Thr Glu Lys Ser Pro Glu Val Thr Leu Gln Leu Tyr Asn Ser Val
 85 90 95

Lys Tyr Glu Pro Pro Leu Gly Asp Ile Lys Val Ser Lys Leu Ala Gly
 100 105 110

Gln Leu Arg Met Glu Trp Glu Thr Pro Asp Asn Gln Val Gly Ala Glu
 115 120 125

Val Gln Phe Arg His Arg Thr Pro Ser Ser Pro Trp Lys Leu Gly Asp
130 135 140

Cys Gly Pro Gln Asp Asp Asp Thr Glu Ser Cys Leu Cys Pro Leu Glu
145 150 155 160

Met Asn Val Ala Gln Glu Phe Gln Leu Arg Arg Arg Gln Leu Gly Ser
165 170 175

Gln Gly Ser Ser Trp Ser Lys Trp Ser Ser Pro Val Cys Val Pro Pro
180 185 190

Glu

<210> 51
<211> 214
<212> PRT
<213> Mus musculus

<400> 51

Gly Ser Pro Leu Gly Pro Arg Asn Leu Ser Cys Tyr Arg Val Ser Lys
1 5 10 15

Thr Asp Tyr Glu Cys Ser Trp Gln Tyr Asp Gly Pro Glu Asp Asn Val
20 25 30

Ser His Val Leu Trp Cys Cys Phe Val Pro Pro Asn His Thr His Thr
35 40 45

Gly Gln Glu Arg Cys Arg Tyr Phe Ser Ser Gly Pro Asp Arg Thr Val
50 55 60

Gln Phe Trp Glu Gln Asp Gly Ile Pro Val Leu Ser Lys Val Asn Phe
65 70 75 80

Trp Val Glu Ser Arg Leu Gly Asn Arg Thr Met Lys Ser Gln Lys Ile
85 90 95

Ser Gln Tyr Leu Tyr Asn Trp Thr Lys Thr Thr Pro Pro Leu Gly His
100 105 110

Ile Lys Val Ser Gln Ser His Gly Gln Leu Arg Met Asp Trp Asn Val
115 120 125

Ser Glu Glu Ala Gly Ala Glu Val Gln Phe Arg Arg Arg Met Pro Thr
130 135 140

Thr Asn Trp Thr Leu Gly Asp Cys Gly Pro Gln Val Asn Ser Gly Ser
 145 150 155 160

Gly Val Leu Gly Asp Ile Cys Gly Ser Met Ser Glu Ser Cys Leu Cys
 165 170 175

Pro Ser Glu Asn Met Ala Gln Glu Ile Gln Ile Arg Arg Arg Arg Arg
 180 185 190

Leu Ser Ser Gly Ala Arg Gly Gly Pro Trp Ser Glu Trp Ser Met Pro
 195 200 205

Val Cys Val Pro Pro Glu
 210

<210> 52
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 52

Gly Asp Pro Glu Ser Ala Val Thr Glu Leu Gln Cys Ile Trp His Asn
 1 5 10 15

Leu Ser Tyr Met Lys Cys Ser Trp Leu Pro Gly Arg Asn Thr Ser Pro
 20 25 30

Asp Thr Asn Tyr Thr Leu Tyr Tyr Trp His Arg Ser Leu Glu Lys Ile
 35 40 45

His Gln Cys Glu Asn Ile Phe Arg Glu Gly Gln Tyr Phe Gly Cys Ser
 50 55 60

Phe Asp Leu Thr Lys Val Lys Asp Ser Ser Phe Glu Gln His Ser Val
 65 70 75 80

Gln Ile Met Val Lys Asp Asn Ala Gly Lys Ile Lys Pro Ser Phe Asn
 85 90 95

Ile Val Pro Leu Thr Ser Arg Val Lys Pro Asp Pro Pro His Ile Lys
 100 105 110

Asn Leu Ser Phe His Asn Asp Asp Leu Tyr Val Gln Trp Glu Asn Pro
 115 120 125

Gln Asn Phe Ile Ser Arg Cys Leu Phe Tyr Glu Val Glu Val Asn Asn
 130 135 140

Ser Gln Thr Glu Thr His Asn Val Phe Tyr Val Gln Glu Ala Lys Cys
 145 150 155 160

Glu Asn Pro Glu Phe Glu Arg Asn Val Glu Asn Thr Ser Cys Phe Met
 165 170 175

Val Pro Gly Val Leu Pro Asp Thr Asn Leu Thr Val Arg Ile Arg Val
 180 185 190

Lys Thr Asn Lys Leu Cys Tyr Glu Asp Asp Lys Leu Trp Ser Asn Trp
 195 200 205

Ser Gln Glu Met Ser Ile Gly
 210 215

<210> 53
 <211> 215
 <212> PRT
 <213> Mus musculus

<400> 53

Gly Asp Pro Glu Ser Ala Val Thr Glu Leu Lys Cys Ile Trp His Asn
 1 5 10 15

Leu Ser Tyr Met Lys Cys Ser Trp Leu Pro Gly Arg Asn Thr Ser Pro
 20 25 30

Asp Thr His Tyr Thr Leu Tyr Tyr Trp Tyr Ser Ser Leu Glu Lys Ser
 35 40 45

Arg Gln Cys Glu Asn Ile Tyr Arg Glu Gly Gln His Ile Ala Cys Phe
 50 55 60

Ser Lys Leu Thr Lys Val Glu Pro Ser Phe Glu His Gln Asn Val Gln
 65 70 75 80

Ile Met Val Lys Asp Asn Ala Gly Lys Ile Arg Pro Ser Cys Lys Ile
 85 90 95

Val Ser Leu Thr Ser Tyr Val Lys Pro Asp Pro Pro His Ile Lys His
 100 105 110

Leu Leu Leu Lys Asn Gly Ala Leu Leu Val Gln Trp Lys Asn Pro Gln
 115 120 125

Asn Phe Arg Ser Arg Cys Leu Thr Tyr Glu Val Glu Val Asn Asn Thr
 130 135 140

Gln Thr Asp Arg His Asn Ile Leu Glu Val Glu Glu Asp Lys Cys Gln
 145 150 155 160

Asn Ser Glu Ser Asp Arg Asn Met Glu Gly Thr Ser Cys Phe Gln Leu
 165 170 175

Pro Gly Val Leu Ala Asp Ala Val Tyr Thr Val Arg Val Arg Val Trp
 180 185 190

Val Lys Thr Asn Lys Leu Cys Phe Asp Asp Asn Lys Leu Trp Ser Asp
 195 200 205

Trp Ser Glu Ala Gln Ser Ile
 210 215

<210> 54
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 54

Gly Ile Pro Glu Thr Lys Val Gln Asp Met Asp Cys Val Tyr Tyr Asn
 1 5 10 15

Trp Gln Tyr Leu Leu Cys Ser Trp Lys Pro Gly Ile Gly Val Leu Leu
 20 25 30

Asp Thr Asn Tyr Asn Leu Phe Tyr Trp Tyr Glu Gly Leu Asp His Ala
 35 40 45

Leu Gln Cys Val Asp Tyr Ile Lys Ala Asp Gly Gln Asn Ile Gly Cys
 50 55 60

Arg Phe Pro Tyr Leu Glu Ala Ser Asp Tyr Lys Asp Phe Tyr Ile Cys
 65 70 75 80

Val Asn Gly Ser Ser Glu Asn Lys Pro Ile Arg Ser Ser Tyr Phe Thr
 85 90 95

Phe Gln Leu Gln Asn Ile Val Lys Pro Leu Pro Pro Val Tyr Leu Thr
 100 105 110

Phe Thr Arg Glu Ser Ser Cys Glu Ile Lys Leu Lys Trp Ser Ile Pro
115 120 125

Leu Gly Pro Ile Pro Ala Arg Cys Phe Ile Glu Ile Arg Glu Asp Asp
130 135 140

Thr Thr Leu Val Thr Ala Thr Val Glu Asn Glu Thr Tyr Thr Leu Lys
145 150 155 160

Thr Thr Asn Glu Thr Arg Gln Leu Cys Phe Val Val Arg Ser Lys Val
165 170 175

Asn Ile Tyr Cys Ser Asp Asp Gly Ile Trp Ser Glu Trp Ser Asp Lys
180 185 190

Gln Cys Trp Glu Gly
195

<210> 55
<211> 200
<212> PRT
<213> Mus musculus

<400> 55

Gly Ser Leu Glu Thr Lys Ile Gln Asp Met Lys Cys Ile Tyr Tyr Asn
1 5 10 15

Trp Gln Tyr Leu Val Cys Ser Trp Lys Pro Gly Lys Thr Val Tyr Ser
20 25 30

Asp Thr Asn Tyr Thr Met Phe Phe Trp Tyr Glu Gly Leu Asp His Ala
35 40 45

Leu Gln Cys Ala Asp Tyr Leu Gln His Asp Glu Lys Asn Val Gly Cys
50 55 60

Lys Leu Ser Asn Leu Asp Ser Ser Asp Tyr Lys Asp Phe Phe Ile Cys
65 70 75 80

Val Asn Gly Ser Ser Lys Leu Glu Pro Ile Arg Ser Ser Tyr Thr Val
85 90 95

Phe Gln Leu Gln Asn Ile Val Lys Pro Leu Pro Pro Glu Phe Leu His
100 105 110

Ile Ser Val Glu Asn Ser Ile Asp Ile Arg Met Lys Trp Ser Thr Pro
115 120 125

Gly Gly Pro Ile Pro Pro Arg Cys Tyr Thr Tyr Glu Ile Val Ile Arg
 130 135 140

Glu Asp Asp Ile Ser Trp Glu Ser Ala Thr Asp Lys Asn Asp Met Lys
 145 150 155 160

Leu Lys Arg Arg Ala Asn Glu Ser Glu Asp Leu Cys Phe Phe Val Arg
 165 170 175

Cys Lys Val Asn Ile Tyr Cys Ala Asp Asp Gly Ile Trp Ser Glu Trp
 180 185 190

Ser Glu Glu Glu Cys Trp Glu Gly
 195 200

<210> 56
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 56

Gly Ser Pro Gly Thr Ser Ile Val Asn Leu Thr Cys Thr Thr Asn Thr
 1 5 10 15

Thr Glu Asp Asn Tyr Ser Arg Leu Arg Ser Tyr Gln Val Ser Leu His
 20 25 30

Cys Thr Trp Leu Val Gly Thr Asp Ala Pro Glu Asp Thr Gln Tyr Phe
 35 40 45

Leu Tyr Tyr Arg Tyr Gly Ser Trp Thr Glu Glu Cys Gln Glu Tyr Ser
 50 55 60

Lys Asp Thr Leu Gly Arg Asn Ile Ala Cys Trp Phe Pro Arg Thr Phe
 65 70 75 80

Ile Leu Ser Lys Gly Arg Asp Trp Leu Ser Val Leu Val Asn Gly Ser
 85 90 95

Ser Lys His Ser Ala Ile Arg Pro Phe Asp Gln Leu Phe Ala Leu His
 100 105 110

Ala Ile Asp Gln Ile Asn Pro Pro Leu Asn Val Thr Ala Glu Ile Glu
 115 120 125

Gly Thr Arg Leu Ser Ile Gln Trp Glu Lys Pro Val Ser Ala Phe Pro
130 135 140

Pro His Cys Phe Asp Tyr Glu Val Lys Ile His Asn Thr Arg Asn Gly
145 150 155 160

Tyr Leu Gln Ile Glu Lys Leu Met Thr Asn Ala Phe Ile Ser Ile Ile
165 170 175

Asp Asp Leu Ser Lys Tyr Asp Val Gln Val Arg Ala Ala Val Ser Ser
180 185 190

Met Cys Arg Glu Ala Gly Leu Trp Ser Glu Trp Ser Gln Pro Ile Tyr
195 200 205

Val Gly
210

<210> 57
<211> 211
<212> PRT
<213> Mus musculus

<400> 57

Gly Ser Pro Gly Thr Ser Val Thr Asn Leu Thr Cys Thr Thr His Thr
1 5 10 15

Val Val Ser Ser His Thr His Leu Arg Pro Tyr Gln Val Ser Leu Arg
20 25 30

Cys Thr Trp Leu Val Gly Lys Asp Ala Pro Glu Asp Thr Gln Tyr Phe
35 40 45

Leu Tyr Tyr Arg Phe Gly Val Leu Thr Glu Lys Cys Gln Glu Tyr Ser
50 55 60

Arg Asp Ala Leu Asn Arg Asn Thr Ala Cys Trp Phe Pro Arg Thr Phe
65 70 75 80

Ile Asn Lys Ser Lys Gly Phe Glu Gln Leu Ala Val His Ile Asn Gly
85 90 95

Ser Ser Lys Arg Ala Ala Ile Lys Pro Phe Asp Gln Leu Phe Ser Pro
100 105 110

Leu Ala Ile Asp Gln Val Asn Pro Pro Arg Asn Val Thr Val Glu Ile
115 120 125

Glu Ser Asn Ser Leu Tyr Ile Gln Trp Glu Lys Pro Leu Ser Ala Phe
 130 135 140

Pro Asp His Cys Phe Asn Glu Leu Arg Lys Ile Tyr Asn Thr Lys Asn
 145 150 155 160

Gly His Ile Gln Lys Glu Lys Leu Ile Ala Asn Lys Phe Ile Ser Lys
 165 170 175

Ile Asp Asp Val Ser Thr Tyr Ser Ile Gln Val Arg Ala Ala Val Ser
 180 185 190

Ser Pro Cys Arg Met Pro Gly Arg Trp Gly Glu Trp Ser Gln Pro Ile
 195 200 205

Tyr Val Gly
 210

<210> 58
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 58

Gly Arg Glu Gly Thr Ala Ala Gln Asn Phe Ser Cys Phe Ile Tyr Asn
 1 5 10 15

Ala Asp Leu Met Asn Cys Thr Trp Ala Arg Gly Pro Thr Ala Pro Arg
 20 25 30

Asp Val Gln Tyr Phe Leu Tyr Ile Arg Asn Ser Lys Arg Arg Arg Glu
 35 40 45

Ile Arg Cys Pro Tyr Tyr Ile Gln Asp Ser Gly Thr His Val Gly Cys
 50 55 60

His Leu Asp Asn Leu Ser Gly Leu Thr Ser Arg Asn Tyr Phe Leu Val
 65 70 75 80

Asn Gly Thr Ser Arg Glu Ile Gly Ile Gln Phe Phe Asp Ser Leu Leu
 85 90 95

Asp Thr Lys Lys Ile Glu Arg Phe Asn Pro Pro Ser Asn Val Thr Val
 100 105 110

Arg Cys Asn Thr Thr His Cys Leu Val Arg Trp Lys Gln Pro Arg Thr
115 120 125

Tyr Gln Lys Leu Ser Tyr Leu Asp Phe Gln Tyr Gln Gln Leu Asp Val
130 135 140

His Arg Lys Asn Thr Gln Pro Gly Thr Glu Asn Leu Leu Ile Asn Val
145 150 155 160

Ser Gly Asp Leu Glu Asn Arg Thr Asn Glu Pro Ser Ser Glu Pro Arg
165 170 175

Ala Lys His Ser Val Lys Ile Arg Ala Ala Asp Val Arg Ile Leu Asn
180 185 190

Trp Ser Ser Trp Ser Glu Ala Ile Glu Phe Gly Ser Asp Asp Gly Asn
195 200 205

Leu Gly Ser Val Tyr Ile Tyr Val Leu Leu
210 215

<210> 59
<211> 213
<212> PRT
<213> Mus musculus

<400> 59

Glu Ser Ala Ala Gly Ser Gly Ala Glu Asn Leu Thr Cys Glu Ile Arg
1 5 10 15

Ala Ala Arg Phe Leu Ser Cys Ala Trp Arg Glu Gly Pro Ala Ala Pro
20 25 30

Ala Asp Val Arg Tyr Ser Leu Arg Val Leu Asn Ser Thr Gly His Asp
35 40 45

Val Ala Arg Cys Met Ala Asp Pro Gly Asp Asp Val Ile Thr Gln Cys
50 55 60

Ile Ala Asn Asp Leu Ser Leu Leu Gly Ser Glu Ala Tyr Leu Val Val
65 70 75 80

Thr Gly Arg Ser Gly Ala Gly Pro Val Arg Phe Leu Asp Asp Val Val
85 90 95

Ala Thr Lys Ala Leu Glu Arg Leu Gly Pro Pro Arg Asp Val Thr Ala

| 100 | | | | | | | | | | 105 | | | | | 110 | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|--|--|
| Ser | Cys | Asn | Ser | Ser | His | Cys | Thr | Val | Ser | Trp | Ala | Pro | Pro | Ser | Thr | | | | | | |
| | | 115 | | | | | 120 | | | | | 125 | | | | | | | | | |
| Lys | Ala | Ser | Leu | Thr | Ala | Arg | Asp | Phe | Gln | Phe | Glu | Val | Gln | Trp | Gln | | | | | | |
| | 130 | | | | | 135 | | | | | 140 | | | | | | | | | | |
| Ser | Ala | Glu | Pro | Gly | Ser | Thr | Pro | Arg | Lys | Val | Leu | Val | Val | Glu | Glu | | | | | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | | | | | |
| Thr | Arg | Leu | Ala | Phe | Pro | Ser | Pro | Ala | Pro | His | Gly | Gly | His | Lys | Val | | | | | | |
| | | | | 165 | | | | | 170 | | | | | 175 | | | | | | | |
| Lys | Val | Arg | Ala | Gly | Asp | Thr | Arg | Met | Lys | His | Trp | Gly | Glu | Trp | Ser | | | | | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | | | | | |
| Pro | Ala | His | Pro | Leu | Glu | Ala | Glu | Asp | Thr | Arg | Val | Pro | Gly | Ala | Leu | | | | | | |
| | | 195 | | | | | 200 | | | | | 205 | | | | | | | | | |
| Leu | Tyr | Ala | Val | Thr | | | | | | | | | | | | | | | | | |
| | 210 | | | | | | | | | | | | | | | | | | | | |
| <210> 60 | | | | | | | | | | | | | | | | | | | | | |
| <211> 193 | | | | | | | | | | | | | | | | | | | | | |
| <212> PRT | | | | | | | | | | | | | | | | | | | | | |
| <213> Homo sapiens | | | | | | | | | | | | | | | | | | | | | |
| <400> 60 | | | | | | | | | | | | | | | | | | | | | |
| Ser | Gly | Lys | Pro | Trp | Ala | Gly | Ala | Glu | Asn | Leu | Thr | Cys | Trp | Ile | His | | | | | | |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | | | | | | | |
| Asp | Val | Asp | Phe | Leu | Ser | Cys | Ser | Trp | Ala | Val | Gly | Pro | Gly | Ala | Pro | | | | | | |
| | | | 20 | | | | | 25 | | | | | 30 | | | | | | | | |
| Ala | Asp | Val | Gln | Tyr | Asp | Leu | Tyr | Leu | Asn | Val | Ala | Asn | Arg | Arg | Gln | | | | | | |
| | | 35 | | | | | 40 | | | | | 45 | | | | | | | | | |
| Gln | Tyr | Glu | Cys | Leu | His | Tyr | Lys | Thr | Asp | Ala | Gln | Gly | Thr | Arg | Ile | | | | | | |
| | 50 | | | | | 55 | | | | | 60 | | | | | | | | | | |
| Gly | Cys | Arg | Phe | Asp | Asp | Ile | Ser | Arg | Leu | Ser | Ser | Gly | Ser | Gln | Ser | | | | | | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | | | | | | |
| Ser | His | Ile | Leu | Val | Arg | Gly | Arg | Ser | Ala | Ala | Phe | Gly | Ile | Pro | Cys | | | | | | |
| | | | | 85 | | | | | 90 | | | | | 95 | | | | | | | |

Thr Asp Lys Phe Val Val Phe Ser Gln Ile Glu Ile Leu Thr Pro Pro
 100 105 110

Asn Met Thr Ala Lys Cys Asn Lys Thr His Ser Phe Met His Trp Lys
 115 120 125

Met Arg Ser His Glu Asn Arg Lys Phe Arg Tyr Glu Leu Gln Ile Gln
 130 135 140

Lys Arg Met Gln Pro Val Ile Thr Glu Gln Val Arg Asp Arg Thr Ser
 145 150 155 160

Phe Gln Leu Leu Asn Pro Gly Thr Tyr Thr Val Gln Ile Arg Ala Arg
 165 170 175

Glu Arg Val Tyr Glu Phe Leu Ser Ala Trp Ser Thr Pro Gln Arg Phe
 180 185 190

Glu

<210> 61
 <211> 210
 <212> PRT
 <213> Mus musculus

<400> 61

Asp Gly Asp His Glu Ala Ala Ala Gln Asp Leu Arg Cys Trp Val His
 1 5 10 15

Glu Gly Gln Leu Ser Cys Gln Trp Glu Arg Gly Pro Lys Ala Thr Gly
 20 25 30

Asp Val His Tyr Arg Met Phe Trp Arg Asp Val Arg Leu Gly Pro Ala
 35 40 45

His Asn Arg Glu Cys Pro His Tyr His Ser Leu Asp Val Asn Thr Ala
 50 55 60

Gly Pro Ala Pro His Gly Gly His Glu Gly Cys Thr Leu Asp Leu Asp
 65 70 75 80

Thr Val Leu Gly Ser Thr Pro Asn Ser Pro Asp Leu Val Pro Gln Val
 85 90 95

Thr Ile Thr Val Asn Gly Ser Gly Arg Ala Gly Pro Val Pro Cys Met

| | | |
|---|-----|-----|
| 100 | 105 | 110 |
| Asp Asn Thr Val Asp Leu Gln Arg Ala Glu Val Leu Ala Pro Pro Thr | | |
| 115 | 120 | 125 |
| Leu Thr Val Glu Cys Asn Gly Ser Glu Ala His Ala Arg Trp Val Ala | | |
| 130 | 135 | 140 |
| Arg Asn Glu Phe His His Gly Leu Leu Gly Tyr Thr Leu Gln Val Asn | | |
| 145 | 150 | 155 |
| Gln Ser Ser Arg Ser Glu Pro Gln Glu Tyr Asn Val Ser Ile Pro His | | |
| 165 | 170 | 175 |
| Glu Trp Val Pro Asn Ala Gly Ala Ile Ser Phe Arg Val Lys Ser Arg | | |
| 180 | 185 | 190 |
| Ser Glu Val Tyr Pro Arg Lys Leu Ser Ser Trp Ser Glu Ala Trp Gly | | |
| 195 | 200 | 205 |
| Leu Val | | |
| 210 | | |
| <210> 62 | | |
| <211> 213 | | |
| <212> PRT | | |
| <213> Homo sapiens | | |
| <400> 62 | | |
| Asp Phe Phe Leu Thr Thr Met Pro Thr Asp Ser Leu Ser Val Ser Thr | | |
| 1 | 5 | 10 |
| Leu Pro Leu Pro Glu Val Gln Cys Phe Val Phe Asn Val Glu Tyr Met | | |
| 20 | 25 | 30 |
| Asn Cys Thr Trp Asn Ser Ser Ser Glu Pro Gln Pro Thr Asn Leu Thr | | |
| 35 | 40 | 45 |
| Leu His Tyr Trp Tyr Lys Asn Ser Asp Asn Asp Lys Val Gln Lys Cys | | |
| 50 | 55 | 60 |
| Ser His Tyr Leu Phe Ser Glu Glu Ile Thr Ser Gly Cys Gln Leu Gln | | |
| 65 | 70 | 75 |
| Lys Lys Glu Ile His Leu Tyr Gln Thr Phe Val Val Gln Leu Gln Asp | | |
| 85 | 90 | 95 |

Pro Arg Glu Pro Arg Arg Gln Ala Thr Gln Met Leu Lys Leu Gln Asn
 100 105 110

Leu Val Ile Pro Trp Ala Pro Glu Asn Leu Thr Leu His Lys Leu Ser
 115 120 125

Glu Ser Gln Leu Glu Leu Asn Trp Asn Asn Arg Phe Leu Asn His Cys
 130 135 140

Leu Glu His Leu Val Gln Tyr Arg Thr Trp Asp His Ser Thr Glu Gln
 145 150 155 160

Ser Val Asp Tyr Arg His Lys Phe Ser Leu Pro Ser Val Asp Gly Gln
 165 170 175

Lys Arg Tyr Thr Phe Arg Val Arg Ser Arg Phe Asn Pro Leu Cys Gly
 180 185 190

Ser Ala Gln His Trp Ser Glu Trp Ser His Pro Ile His Trp Gly Ser
 195 200 205

Asn Thr Ser Lys Glu
 210

<210> 63
 <211> 216
 <212> PRT
 <213> Mus musculus

<400> 63

Asp Leu Ile Leu Thr Ser Thr Ala Pro Glu His Leu Ser Ala Pro Thr
 1 5 10 15

Leu Pro Leu Pro Glu Val Gln Cys Phe Val Phe Asn Ile Glu Tyr Met
 20 25 30

Asn Cys Thr Trp Asn Ser Ser Ser Glu Pro Gln Ala Thr Asn Leu Thr
 35 40 45

Leu His Arg Tyr Arg Lys Val Ser Asp Asn Asn Thr Phe Gln Glu Cys
 50 55 60

Ser His Tyr Leu Phe Ser Lys Glu Ile Thr Ser Gly Cys Gln Ile Gln
 65 70 75 80

Lys Glu Asp Ile Gln Leu Tyr Gln Thr Phe Val Val Gln Leu Gln Asp

| | | | | | |
|--------------------|-------------------------|-----------------|-----------------|-----|----|
| | 85 | | 90 | | 95 |
| Pro Gln Lys | Pro Gln Arg Arg Ala Val | Gln Lys Leu Asn | Leu Gln Asn | | |
| | 100 | 105 | 110 | | |
| Leu Val Ile | Pro Arg Ala Pro Glu Asn | Leu Thr Leu Ser | Asn Leu Ser | | |
| | 115 | 120 | 125 | | |
| Glu Ser Gln | Leu Glu Leu Arg Trp Lys | Ser Arg His Ile | Lys Glu Arg | | |
| | 130 | 135 | 140 | | |
| Cys Leu Gln | Tyr Leu Val Gln Tyr Arg | Ser Asn Arg Asp | Arg Ser Trp | | |
| | 145 | 150 | 155 | 160 | |
| Thr Glu Leu | Ile Val Asn His Glu Pro | Arg Phe Ser Leu | Pro Ser Val | | |
| | 165 | 170 | 175 | | |
| Asp Glu Leu | Lys Arg Tyr Thr Phe Arg | Val Arg Ser Arg | Tyr Asn Pro | | |
| | 180 | 185 | 190 | | |
| Ile Cys Gly | Ser Ser Gln Gln Trp Ser | Lys Trp Ser Gln | Pro Val His | | |
| | 195 | 200 | 205 | | |
| Trp Gly Ser | His Thr Val Glu Glu | | | | |
| | 210 | 215 | | | |
| <210> 64 | | | | | |
| <211> 187 | | | | | |
| <212> PRT | | | | | |
| <213> Homo sapiens | | | | | |
| <400> 64 | | | | | |
| Val Gln Ile | Gln Ile Ile Tyr Phe Asn | Leu Glu Thr Val | Gln Val Thr | | |
| 1 | 5 | 10 | 15 | | |
| Trp Asn Ala | Ser Lys Tyr Ser Arg Thr | Asn Leu Thr Phe | His Tyr Arg | | |
| | 20 | 25 | 30 | | |
| Phe Asn Gly | Asp Glu Ala Tyr Asp | Gln Cys Thr Asn | Tyr Leu Leu Gln | | |
| | 35 | 40 | 45 | | |
| Glu Gly His | Thr Ser Gly Cys Leu Leu | Asp Ala Glu Gln | Arg Asp Asp | | |
| | 50 | 55 | 60 | | |
| Ile Leu Tyr | Phe Ser Ile Arg Asn Gly | Thr His Pro Val | Phe Thr Ala | | |
| 65 | 70 | 75 | 80 | | |

Ser Arg Trp Met Val Tyr Tyr Leu Lys Pro Ser Ser Pro Lys His Val
85 90 95

Arg Phe Ser Trp His Gln Asp Ala Val Thr Val Thr Cys Ser Asp Leu
100 105 110

Ser Tyr Gly Asp Leu Leu Tyr Glu Val Gln Tyr Arg Ser Pro Phe Asp
115 120 125

Thr Glu Trp Gln Ser Lys Gln Glu Asn Thr Cys Asn Val Thr Ile Glu
130 135 140

Gly Leu Asp Ala Glu Lys Cys Tyr Ser Phe Trp Val Arg Val Lys Ala
145 150 155 160

Met Glu Asp Val Tyr Gly Pro Asp Thr Tyr Pro Ser Asp Trp Ser Glu
165 170 175

Val Thr Cys Trp Gln Arg Gly Glu Ile Arg Asp
180 185

<210> 65
<211> 191
<212> PRT
<213> Mus musculus

<400> 65

Gly Asp Val Thr Val Val Cys His Asp Leu Glu Thr Val Glu Val Thr
1 5 10 15

Trp Gly Ser Gly Pro Asp His His Ser Ala Asn Leu Ser Leu Glu Phe
20 25 30

Arg Tyr Gly Thr Gly Ala Leu Gln Pro Cys Pro Arg Tyr Phe Leu Ser
35 40 45

Gly Ala Gly Val Thr Ser Gly Cys Ile Leu Pro Ala Ala Arg Ala Gly
50 55 60

Leu Leu Glu Leu Ala Leu Arg Asp Gly Gly Gly Ala Met Val Phe Lys
65 70 75 80

Ala Arg Gln Arg Ala Ser Ala Trp Leu Lys Pro Arg Pro Pro Trp Asn
85 90 95

Val Thr Leu Leu Trp Thr Pro Asp Gly Asp Val Thr Val Ser Trp Pro
100 105 110

Ala His Ser Tyr Leu Gly Leu Asp Tyr Glu Val Gln His Arg Glu Ser
115 120 125

Asn Asp Asp Glu Asp Ala Trp Gln Thr Thr Ser Gly Pro Cys Cys Asp
130 135 140

Leu Thr Val Gly Gly Leu Asp Pro Ala Arg Cys Tyr Asp Phe Arg Val
145 150 155 160

Arg Ala Ser Pro Arg Ala Ala His Tyr Gly Leu Glu Ala Gln Pro Ser
165 170 175

Glu Trp Pro Ala Val Thr Arg Leu Ser Gly Ala Ala Ser Ala Gly
180 185 190

<210> 66
<211> 200
<212> PRT
<213> Homo sapiens

<400> 66

Gly Ala Pro His Asp Leu Lys Cys Val Thr Asn Asn Leu Gln Val Trp
1 5 10 15

Asn Cys Ser Trp Lys Ala Pro Ser Gly Thr Gly Arg Gly Thr Asp Tyr
20 25 30

Glu Val Cys Ile Glu Asn Arg Ser Arg Ser Cys Tyr Gln Leu Glu Lys
35 40 45

Thr Ser Ile Lys Ile Pro Ala Leu Ser His Gly Asp Tyr Glu Ile Thr
50 55 60

Ile Asn Ser Leu His Asp Phe Gly Ser Ser Thr Ser Lys Phe Thr Leu
65 70 75 80

Asn Glu Gln Asn Val Ser Leu Ile Pro Asp Thr Pro Glu Ile Leu Asn
85 90 95

Leu Ser Ala Asp Phe Ser Thr Ser Thr Leu Tyr Leu Arg Trp Asn Asp
100 105 110

Arg Gly Ser Val Pro Pro His Arg Ser Asn Val Ile Trp Glu Ile Lys

| | | |
|--|-----|-----|
| 115 | 120 | 125 |
| Val Leu Arg Lys Glu Ser Met Glu Leu Val Lys Leu Val Thr His Asn 130 135 140 | | |
| Thr Thr Leu Asn Gly Lys Asp Thr Leu His His Trp Ser Trp Ala Ser 145 150 155 160 | | |
| Asp Met Pro Leu Glu Ala Cys Ala Ile His Phe Val Glu Ile Arg Cys 165 170 175 | | |
| Tyr Ile Asp Asn Leu His Phe Ser Gly Leu Glu Glu Trp Ser Asp Trp 180 185 190 | | |
| Ser Pro Val Lys Asn Ile Ser Trp 195 200 | | |
| <210> 67 | | |
| <211> 195 | | |
| <212> PRT | | |
| <213> Mus musculus | | |
| <400> 67 | | |
| Gly Val Gln Asp Leu Lys Cys Thr Thr Asn Asn Met Arg Val Trp Asp 1 5 10 15 | | |
| Cys Thr Trp Pro Ala Pro Leu Gly Val Ser Pro Gly Thr Val Lys Asp 20 25 30 | | |
| Ile Cys Ile Lys Asp Arg Phe His Ser Cys His Pro Leu Glu Thr Thr 35 40 45 | | |
| Asn Val Lys Ile Pro Ala Leu Ser Pro Gly Asp His Glu Val Thr Ile 50 55 60 | | |
| Asn Tyr Leu Asn Gly Phe Gln Ser Lys Phe Thr Leu Asn Glu Lys Asp 65 70 75 80 | | |
| Val Ser Leu Ile Pro Glu Thr Pro Glu Ile Leu Asp Leu Ser Ala Asp 85 90 95 | | |
| Phe Phe Thr Ser Ser Glu Leu Leu Lys Trp Asn Asp Arg Gly Ser Ala 100 105 110 | | |
| Leu Pro His Pro Ser Asn Ala Thr Trp Glu Ile Lys Val Leu Gln Asn 115 120 125 | | |

Pro Arg Thr Glu Pro Val Ala Leu Val Leu Leu Asn Thr Met Leu Ser
130 135 140

Gly Lys Asp Thr Val Gln His Trp Asn Trp Thr Ser Asp Leu Pro Leu
145 150 155 160

Gln Cys Ala Thr His Ser Val Ser Leu Arg Trp His Ile Asp Ser Pro
165 170 175

His Phe Ser Gly Tyr Lys Glu Trp Ser Pro Trp Ser Pro Leu Lys Asn
180 185 190

Ile Ser Trp
195

<210> 68
<211> 204
<212> PRT
<213> Homo sapiens

<400> 68

Tyr Pro Pro Asp Thr Pro Gln Gln Leu Asn Cys Glu Thr His Asp Leu
1 5 10 15

Lys Glu Ile Ile Cys Ser Trp Asn Pro Gly Arg Val Thr Ala Leu Val
20 25 30

Gly Pro Arg Ala Thr Ser Tyr Thr Leu Val Glu Ser Phe Ser Gly Lys
35 40 45

Tyr Val Arg Leu Lys Arg Ala Glu Ala Pro Thr Asn Glu Ser Tyr Gln
50 55 60

Leu Leu Phe Gln Met Leu Pro Asn Gln Glu Ile Tyr Asn Phe Thr Leu
65 70 75 80

Asn Ala His Asn Pro Leu Gly Arg Ser Gln Ser Thr Ile Leu Val Asn
85 90 95

Ile Thr Glu Lys Val Tyr Pro His Thr Pro Thr Ser Phe Lys Val Lys
100 105 110

Asp Ile Asn Ser Thr Ala Val Lys Leu Ser Trp His Leu Pro Gly Asn
115 120 125

Phe Ala Lys Ile Asn Phe Leu Cys Glu Ile Lys Ile Lys Lys Ser Asn

| | | |
|---|-----|---------|
| 130 | 135 | 140 |
| Ser Val Gln Glu Gln Arg Asn Val Thr Ile Lys Gly Val Glu Asn Ser | | |
| 145 | 150 | 155 160 |
| Ser Tyr Leu Val Ala Leu Asp Lys Leu Asn Pro Tyr Thr Leu Tyr Thr | | |
| | 165 | 170 175 |
| Phe Arg Ile Arg Cys Ser Thr Glu Thr Phe Trp Lys Trp Ser Lys Trp | | |
| | 180 | 185 190 |
| Ser Asn Lys Lys Gln His Leu Thr Thr Glu Ala Ser | | |
| | 195 | 200 |
| <210> 69 | | |
| <211> 204 | | |
| <212> PRT | | |
| <213> Mus musculus | | |
| <400> 69 | | |
| Tyr Pro Pro Asp Val Pro Gln Lys Leu Ser Cys Glu Thr His Asp Leu | | |
| 1 | 5 | 10 15 |
| Lys Glu Ile Ile Cys Ser Trp Asn Pro Gly Arg Ile Thr Gly Leu Val | | |
| | 20 | 25 30 |
| Gly Pro Arg Asn Thr Glu Tyr Thr Leu Phe Glu Ser Ile Ser Gly Lys | | |
| | 35 | 40 45 |
| Ser Ala Val Phe His Arg Ile Glu Gly Leu Thr Asn Glu Thr Tyr Arg | | |
| | 50 | 55 60 |
| Leu Gly Val Gln Met His Pro Gly Gln Glu Ile His Asn Phe Thr Leu | | |
| 65 | 70 | 75 80 |
| Thr Gly Arg Asn Pro Leu Gly Gln Ala Gln Ser Ala Val Val Ile Asn | | |
| | 85 | 90 95 |
| Val Thr Glu Arg Val Ala Pro His Asp Pro Thr Ser Leu Lys Val Lys | | |
| | 100 | 105 110 |
| Asp Ile Asn Ser Thr Val Val Thr Phe Ser Trp Tyr Leu Pro Gly Asn | | |
| | 115 | 120 125 |
| Phe Thr Lys Ile Asn Leu Leu Cys Gln Ile Glu Ile Cys Lys Ala Asn | | |
| | 130 | 135 140 |

Ser Lys Lys Glu Val Arg Asn Ala Thr Ile Arg Gly Ala Glu Asp Ser
145 150 155 160

Thr Tyr His Val Ala Val Asp Lys Leu Asn Pro Tyr Thr Ala Tyr Thr
165 170 175

Phe Arg Val Arg Cys Ser Ser Lys Thr Phe Trp Lys Trp Ser Arg Trp
180 185 190

Ser Asp Glu Lys Arg His Leu Thr Thr Glu Ala Thr
195 200

<210> 70
<211> 116
<212> PRT
<213> Homo sapiens

<400> 70

Val Leu Ala Glu Arg Leu Pro Leu Thr Pro Val Ser Leu Lys Ser Val
1 5 10 15

Thr Asn Ser Thr Arg Gln Ser Leu His Leu Gln Trp Thr Val Glu Asn
20 25 30

Leu Pro Tyr His Gln Glu Leu Lys Met Val Phe Gln Ile Gln Ile Ser
35 40 45

Arg Ile Glu Thr Ser Asn Val Ile Trp Val Gly Asn Tyr Ser Thr Thr
50 55 60

Val Lys Trp Asn Gln Val Leu His Trp Ser Trp Glu Ser Glu Leu Pro
65 70 75 80

Leu Glu Cys Ala Thr His Phe Val Arg Ile Arg Ser Leu Val Asp Asp
85 90 95

Ala Lys Phe Pro Glu Pro Asn Phe Trp Ser Asn Trp Ser Ser Trp Glu
100 105 110

Glu Val Ser Val
115

<210> 71
<211> 115
<212> PRT
<213> Mus musculus

<400> 71

Val Leu Glu Glu Pro Leu Pro Thr Leu Pro Glu Ile His Lys Val Ser
1 5 10 15

Val Gln Leu Lys Leu Gln Glu Val Asn Leu Glu Trp Thr Val Pro Ala
20 25 30

Leu Thr His Glu Glu Leu Asn Met Ile Phe Gln Ile Glu Ile Ser Arg
35 40 45

Leu Asn Ile Ser Asn Thr Ile Trp Val Glu Asn Tyr Ser Thr Thr Val
50 55 60

Lys Arg Glu Glu Ala Val Arg Trp Asn Trp Thr Ser Asp Ile Pro Leu
65 70 75 80

Glu Cys Val Lys His Phe Ile Arg Ile Trp Ala Leu Val Asp Asp Thr
85 90 95

Lys Ser Leu Pro Gln Ser Ser Trp Gly Asn Trp Ser Ser Trp Lys Glu
100 105 110

Val Asn Ala
115

<210> 72

<211> 195

<212> PRT

<213> Homo sapiens

<400> 72

Lys Val Leu Glu Glu Pro Lys Asp Phe Ser Cys Glu Thr Glu Asp Phe
1 5 10 15

Lys Thr Leu His Cys Thr Trp Asp Pro Gly Thr Asp Thr Ala Leu Gly
20 25 30

Trp Ser Lys Gln Pro Ser Gln Ser Tyr Thr Leu Phe Glu Ser Phe Ser
35 40 45

Gly Glu Lys Lys Leu Cys Thr His Lys Asn Trp Cys Asn Trp Gln Ile
50 55 60

Thr Gln Asp Ser Gln Glu Thr Tyr Asn Phe Thr Leu Ile Ala Glu Asn
65 70 75 80

Tyr Leu Arg Lys Arg Ser Val Asn Ile Leu Phe Asn Leu Thr His Arg
85 90 95

Val Tyr Leu Met Asn Pro Phe Ser Val Asn Phe Glu Asn Val Asn Ala
100 105 110

Thr Asn Ala Ile Met Thr Trp Lys Val His Ser Ile Arg Asn Asn Phe
115 120 125

Thr Tyr Leu Cys Gln Ile Glu Leu His Gly Glu Gly Lys Met Met Gln
130 135 140

Tyr Asn Val Ser Ile Lys Val Asn Gly Glu Tyr Phe Leu Ser Glu Leu
145 150 155 160

Glu Pro Ala Thr Glu Tyr Met Ala Arg Val Arg Cys Ala Asp Ala Ser
165 170 175

His Phe Trp Lys Trp Ser Glu Trp Ser Gly Gln Asn Phe Thr Thr Leu
180 185 190

Glu Ala Ala
195

<210> 73
<211> 195
<212> PRT
<213> Mus musculus

<400> 73

Lys Val Leu Glu Glu Pro Lys Asn Val Ser Cys Glu Thr Arg Asp Phe
1 5 10 15

Lys Thr Leu Asp Cys Ser Trp Glu Pro Gly Val Asp Thr Thr Leu Thr
20 25 30

Trp Arg Lys Gln Arg Phe Gln Asn Tyr Thr Leu Cys Glu Ser Phe Ser
35 40 45

Lys Arg Cys Glu Val Ser Asn Tyr Arg Asn Ser Tyr Thr Trp Gln Ile
50 55 60

Thr Glu Gly Ser Gln Glu Met Tyr Asn Phe Thr Leu Thr Ala Glu Asn
65 70 75 80

Gln Leu Arg Lys Arg Ser Val Asn Ile Asn Phe Asn Leu Thr His Arg
 85 90 95

Val His Pro Lys Ala Pro Gln Asp Val Thr Leu Lys Ile Ile Gly Ala
 100 105 110

Thr Lys Ala Asn Met Thr Trp Lys Val His Ser His Gly Asn Asn Tyr
 115 120 125

Thr Tyr Leu Cys Gln Cys Lys Leu Gln Tyr Gly Glu Val Ile His Glu
 130 135 140

His Asn Val Ser Val His Met Ser Ala Asn Tyr Leu Phe Ser Asp Leu
 145 150 155 160

Asp Pro Asp Thr Lys Tyr Lys Ala Phe Val Arg Cys Ala Ser Ala Asn
 165 170 175

His Phe Trp Lys Trp Ser Asp Trp Thr Gln Lys Glu Phe Ser Thr Pro
 180 185 190

Glu Thr Ala
 195

<210> 74
 <211> 206
 <212> PRT
 <213> Homo sapiens

<400> 74

Gly Asp Leu Glu Asp Ala Glu Leu Asp Asp Tyr Ser Phe Ser Cys Tyr
 1 5 10 15

Ser Gln Leu Glu Val Asn Gly Ser Gln His Ser Leu Thr Cys Ala Phe
 20 25 30

Glu Asp Pro Asp Val Asn Thr Thr Asn Leu Glu Phe Glu Ile Cys Gly
 35 40 45

Ala Leu Val Glu Val Lys Cys Leu Asn Phe Arg Lys Leu Gln Glu Ile
 50 55 60

Tyr Phe Ile Glu Thr Lys Lys Phe Leu Leu Ile Gly Lys Ser Asn Ile
 65 70 75 80

Cys Val Lys Val Gly Glu Lys Ser Leu Thr Cys Lys Lys Ile Asp Leu
 85 90 95

Thr Thr Ile Val Lys Pro Glu Ala Pro Phe Asp Leu Ser Val Ile Tyr
100 105 110

Arg Glu Gly Ala Asn Asp Phe Val Val Thr Phe Asn Thr Ser His Leu
115 120 125

Gln Lys Lys Tyr Val Lys Val Leu Met His Asp Val Ala Tyr Arg Gln
130 135 140

Glu Lys Asp Glu Asn Lys Trp Thr His Val Asn Leu Ser Ser Thr Lys
145 150 155 160

Leu Thr Leu Leu Gln Arg Lys Leu Gln Pro Ala Ala Met Tyr Glu Ile
165 170 175

Lys Val Arg Ser Ile Pro Asp His Tyr Phe Lys Gly Phe Trp Ser Pro
180 185 190

Ser Tyr Tyr Glu Arg Thr Pro Glu Ile Asn Asn Ser Ser Gly
195 200 205

<210> 75
<211> 209
<212> PRT
<213> Mus musculus

<400> 75

Gly Asp Leu Glu Asp Ala Asp Ala Asp Asp His Ser Phe Trp Cys His
1 5 10 15

Ser Gln Leu Glu Val Asp Gly Ser Gln His Leu Leu Thr Cys Ala Phe
20 25 30

Asn Asp Ser Asp Ile Asn Thr Ala Asn Leu Glu Phe Gln Ile Cys Gly
35 40 45

Ala Leu Leu Arg Val Lys Cys Leu Thr Leu Asn Lys Leu Gln Asp Ile
50 55 60

Tyr Phe Ile Lys Thr Ser Glu Phe Leu Leu Ile Gly Ser Ser Asn Ile
65 70 75 80

Cys Val Lys Leu Gly Gln Lys Asn Leu Thr Cys Lys Asn Met Ala Ile
85 90 95

Asn Thr Ile Val Lys Ala Glu Ala Pro Ser Asp Leu Lys Val Val Tyr
100 105 110

Arg Lys Glu Ala Asn Asp Phe Leu Val Thr Phe Asn Ala Pro His Leu
115 120 125

Lys Lys Lys Tyr Leu Lys Lys Val Lys His Asp Val Ala Tyr Arg Pro
130 135 140

Ala Arg Gly Glu Ser Asn Trp Thr His Val Ser Leu Phe His Thr Arg
145 150 155 160

Thr Thr Ile Pro Gln Arg Lys Leu Arg Pro Lys Ala Met Tyr Glu Ile
165 170 175

Lys Val Arg Ser Ile Pro His Asn Asp Tyr Phe Lys Gly Phe Trp Ser
180 185 190

Glu Trp Ser Pro Ser Ser Thr Phe Glu Thr Pro Glu Pro Lys Asn Gln
195 200 205

Gly

<210> 76
<211> 216
<212> PRT
<213> Drosophila melanogaster

<400> 76

Lys Ser Lys Val Tyr Val Gly Thr Arg Pro Leu Leu Val Arg Asp Phe
1 5 10 15

Asn Cys Leu Asp Tyr Asp Phe Gln Phe Met Val Cys Asn Phe Thr Gln
20 25 30

Pro Pro Asn Thr Val Ile Thr Lys Tyr Asn Ile Ser Tyr Asn Thr Asn
35 40 45

Asn Asp Trp Arg Tyr Ser Asn Thr Leu Asp Cys Asn Phe Asp Ser Ala
50 55 60

Pro Val Val Thr Cys Asn Leu Thr Asp Asp Asn Tyr Lys Arg Phe Ser
65 70 75 80

Glu Thr Phe Tyr Phe Arg Leu Ser Ile Ser Asn Ala Leu Gly His Glu
85 90 95

Thr Gln Pro Ile Thr Ile Asn His Phe Glu Arg Leu Val Pro Ala Arg
100 105 110

Pro Gly Gln Asn Leu Thr Leu Leu Asn Arg Thr Glu Ser Ser Val Cys
115 120 125

Leu Ser Trp Glu Met Pro Arg Arg Ser Asn Tyr Asn Arg Gly Leu Val
130 135 140

Trp Gln Val Arg Val Thr Pro Gln Asn Phe Glu Pro Ile Thr Arg Pro
145 150 155 160

Ser Trp Arg Asn His Thr Leu Thr Ile Lys Asp Thr Leu Cys Leu Thr
165 170 175

Glu Leu Pro Phe Ala Gly Tyr Asn Tyr Thr Leu Arg Val Arg Val Arg
180 185 190

Ala Asn Gln Asn Asn Thr Leu Trp Ser Glu Pro Met Ile Tyr Ala Phe
195 200 205

Ala Thr Ala Pro Ala Pro Pro Arg
210 215

<210> 77
<211> 216
<212> PRT
<213> Drosophila melanogaster

<400> 77

Gln Ser His Val Cys Val Arg Val Tyr Ala Leu Leu Asn Leu Lys Asp
1 5 10 15

Phe Val Arg Cys Asp Val Val Tyr Tyr Leu Arg Cys Thr Phe Ser Arg
20 25 30

Met Glu Asn Gly Asn Phe Glu Asn Lys Thr His Tyr Gln Leu Ala Met
35 40 45

Gly Arg Ala Lys Pro Ile Asp Cys Arg Lys Ser Glu Asp Glu Arg Ser
50 55 60

Arg Gly Lys Val Glu Cys Ser Val Pro Ile Asp Pro Asn Ser Arg Ala
65 70 75 80

Pro Glu Trp Arg Asp Phe Arg Leu Ile Met Ser Asp Asp Leu Gly Asn
85 90 95

Gln Ser Lys Val Leu Arg Leu Thr Gln Ala Glu Met Glu Val Leu Glu
100 105 110

Trp Pro Arg Gly Lys His Asn Met Ile Gln Thr Pro Asn Gln Thr Cys
115 120 125

Leu Glu Trp Asn Gly Pro Phe Ile Tyr Pro Asn Arg Thr Phe Glu Leu
130 135 140

Asn Val Gln Phe Arg His Ser Lys Leu Pro Asn Leu Ser Arg Asn Leu
145 150 155 160

Thr Val Ser Gln Met Arg Ala Val Ser Val Phe Asp Gln Val Gly Phe
165 170 175

Gly Asn Pro Pro Glu Gly Asn Gln Leu Phe Tyr Val Ser Leu Ser Arg
180 185 190

Arg Leu His Gly Ser Pro Trp Ser Glu Arg Tyr Pro Glu Phe Lys Leu
195 200 205

Thr Thr Asn Ala Ser Leu Pro Ala
210 215

<210> 78
<211> 204
<212> PRT
<213> Artificial

<220>
<223> Consensus

<400> 78

Gly Pro Pro Glu Lys Pro Ala Gln Asn Leu Ser Cys Phe Thr Asp Asn
1 5 10 15

Leu Glu Thr Leu Thr Cys Ser Trp Glu Pro Gly Pro Asp Thr Gly Leu
20 25 30

Pro Thr Asn Tyr Thr Leu Phe Tyr Arg Leu Ser Ser Leu Asp Lys Ile
35 40 45

Lys Glu Cys Pro Leu Tyr Leu Ser Ala Gly Leu Gly Arg Ser Arg Cys
50 55 60

His Ile Pro Asp Asp Leu Ser Ser Thr Ser Pro Tyr Thr Val Ser Val
 65 70 75 80

Thr Ala Thr Asn Pro Leu Gly Ser Ser Ser Ser Ser Asp Leu Thr Phe
 85 90 95

Asp Leu Thr Asp Ile Val Lys Pro Asp Pro Pro Leu Asn Leu Thr Val
 100 105 110

Ser Ile Ser Ser Glu Ser Gly Arg Leu Lys Leu Ser Trp Glu Pro Pro
 115 120 125

Ser Ser Trp Pro Ser Tyr Phe Asp Leu Lys Tyr Glu Val Arg Tyr Arg
 130 135 140

Pro Glu Asn Asp Ser Trp Glu Asp Trp Lys Val Val Glu Leu Asp Ser
 145 150 155 160

Thr Ser Phe Thr Leu Ser Asp Leu Glu Pro Gly Thr Ser Tyr Glu Val
 165 170 175

Arg Val Arg Ala Arg Pro Asp Ser Gly Ser Gly Thr Trp Ser Glu Trp
 180 185 190

Ser Pro Pro Ala Ser Phe Thr Ile Pro Glu Gly Glu
 195 200

<210> 79
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 79

Leu Pro Ala Lys Pro Glu Asn Ile Ser Cys Val Tyr Tyr Tyr Arg Lys
 1 5 10 15

Asn Leu Thr Cys Thr Trp Ser Pro Gly Lys Glu Thr Ser Tyr Thr Gln
 20 25 30

Tyr Thr Val Lys Arg Thr Tyr Ala Phe Gly Glu Lys His Asp Asn Cys
 35 40 45

Thr Thr Asn Ser Ser Thr Ser Glu Asn Arg Ala Ser Cys Ser Phe Phe
 50 55 60

Leu Pro Arg Ile Thr Ile Pro Asp Asn Tyr Thr Ile Glu Val Glu Ala

| | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | | 70 | | 75 | | 80 | | | | | | | | | |
| Glu | Asn | Gly | Asp | Gly | Val | Ile | Lys | Ser | His | Met | Thr | Tyr | Trp | Arg | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Glu | Asn | Ile | Ala | Lys | Thr | Glu | Pro | Pro | Lys | Ile | Phe | Arg | Val | Lys | Pro |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Leu | Gly | Ile | Lys | Arg | Met | Ile | Gln | Ile | Glu | Trp | Ile | Lys | Pro | Trp |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Leu | Ala | Pro | Val | Ser | Ser | Asp | Leu | Lys | Tyr | Thr | Leu | Arg | Phe | Arg | Thr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Val | Asn | Ser | Thr | Ser | Trp | Met | Glu | Val | Asn | Phe | Ala | Lys | Asn | Arg | Lys |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Asp | Lys | Asn | Gln | Thr | Tyr | Asn | Leu | Thr | Gly | Leu | Gln | Pro | Phe | Thr | Glu |
| | | | | 165 | | | | | 170 | | | | | 175 | |
| Tyr | Val | Ile | Ala | Leu | Arg | Cys | Ala | Val | Lys | Glu | Ser | Lys | Phe | Trp | Ser |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Asp | Trp | Ser | Gln | Glu | Lys | Met | Gly | Met | Thr | Glu | Glu | Glu | Ala | Pro | |
| | | 195 | | | | | 200 | | | | | 205 | | | |
| <210> 80 | | | | | | | | | | | | | | | |
| <211> 194 | | | | | | | | | | | | | | | |
| <212> PRT | | | | | | | | | | | | | | | |
| <213> Mus musculus | | | | | | | | | | | | | | | |
| <400> 80 | | | | | | | | | | | | | | | |
| Leu | Pro | Thr | Lys | Pro | Glu | Asn | Ile | Ser | Cys | Val | Phe | Tyr | Phe | Asp | Arg |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Asn | Leu | Thr | Cys | Thr | Trp | Arg | Pro | Glu | Lys | Glu | Thr | Asn | Asp | Thr | Ser |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Tyr | Ile | Val | Thr | Leu | Thr | Tyr | Ser | Tyr | Gly | Lys | Ser | Asn | Tyr | Ser | Asp |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Asn | Ala | Thr | Glu | Ala | Ser | Lys | Ser | Phe | Pro | Arg | Ser | Cys | Ala | Met | Pro |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Pro | Asp | Ile | Cys | Ser | Val | Glu | Val | Gln | Ala | Gln | Asn | Gly | Asp | Gly | Lys |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |

Val Lys Ser Asp Ile Thr Tyr Trp His Leu Ile Ser Ile Ala Lys Thr
85 90 95

Glu Pro Pro Ile Ile Leu Ser Val Asn Pro Ile Cys Asn Arg Met Phe
100 105 110

Gln Ile Gln Trp Lys Pro Arg Glu Lys Thr Arg Gly Phe Pro Leu Val
115 120 125

Cys Met Leu Arg Phe Arg Thr Val Asn Ser Ser Arg Trp Thr Glu Val
130 135 140

Asn Phe Glu Asn Cys Lys Gln Val Cys Asn Leu Thr Gly Leu Gln Ala
145 150 155 160

Phe Thr Glu Tyr Val Leu Ala Leu Arg Phe Arg Phe Asn Asp Ser Arg
165 170 175

Tyr Trp Ser Lys Trp Ser Lys Glu Glu Thr Arg Val Thr Met Glu Glu
180 185 190

Val Pro

<210> 81
<211> 197
<212> PRT
<213> Mus musculus

<400> 81

His Pro Pro Asp Ala Pro Ser Asn Leu Thr Cys Val Ile Tyr Glu Tyr
1 5 10 15

Ser Gly Asn Met Thr Cys Thr Trp Asn Thr Gly Lys Pro Thr Tyr Ile
20 25 30

Asp Thr Lys Tyr Ile Val His Val Lys Ser Leu Glu Thr Glu Glu Glu
35 40 45

Gln Gln Tyr Leu Ala Ser Ser Tyr Val Lys Ile Ser Thr Asp Ser Leu
50 55 60

Gln Gly Ser Arg Lys Tyr Leu Val Trp Val Gln Ala Val Asn Ser Leu
65 70 75 80

Gly Met Glu Asn Ser Gln Gln Leu His Val His Leu Asp Asp Ile Val

85

90

95

Ile Pro Ser Ala Ser Ile Ile Ser Arg Ala Glu Thr Thr Asn Asp Thr
 100 105 110

Val Pro Lys Thr Ile Val Tyr Trp Lys Ser Lys Thr Met Ile Glu Lys
 115 120 125

Val Phe Cys Glu Met Arg Tyr Lys Thr Thr Thr Asn Gln Thr Trp Ser
 130 135 140

Val Lys Glu Phe Asp Ala Asn Phe Thr Tyr Val Gln Gln Ser Glu Phe
 145 150 155 160

Tyr Leu Glu Pro Asp Ser Lys Tyr Val Phe Gln Val Arg Cys Gln Glu
 165 170 175

Thr Gly Lys Arg Asn Trp Gln Pro Trp Ser Ser Pro Phe Val His Gln
 180 185 190

Thr Ser Gln Glu Gly
 195

<210> 82
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 82

Tyr Pro Pro Asp Ile Pro Asp Glu Val Thr Cys Val Ile Tyr Glu Tyr
 1 5 10 15

Ser Gly Asn Met Thr Cys Thr Trp Asn Ala Gly Lys Leu Thr Tyr Ile
 20 25 30

Asp Thr Lys Tyr Val Val His Val Lys Ser Leu Glu Thr Glu Glu Glu
 35 40 45

Gln Gln Tyr Leu Thr Ser Ser Tyr Ile Asn Ile Ser Thr Asp Ser Leu
 50 55 60

Gln Gly Gly Lys Lys Tyr Leu Val Trp Val Gln Ala Ala Asn Ala Leu
 65 70 75 80

Gly Met Glu Glu Ser Lys Gln Leu Gln Ile His Leu Asp Asp Ile Val
 85 90 95

Ile Pro Ser Ala Ala Val Ile Ser Arg Ala Glu Thr Ile Asn Ala Thr
 100 105 110

Val Pro Lys Thr Ile Ile Tyr Trp Asp Ser Gln Thr Thr Ile Glu Lys
 115 120 125

Val Ser Cys Glu Met Arg Tyr Lys Ala Thr Thr Asn Gln Thr Trp Asn
 130 135 140

Val Lys Glu Phe Asp Thr Asn Phe Thr Tyr Val Gln Gln Ser Glu Phe
 145 150 155 160

Tyr Leu Glu Pro Asn Ile Lys Tyr Val Phe Gln Val Arg Cys Gln Glu
 165 170 175

Thr Gly Lys Arg Tyr Trp Gln Pro Trp Ser Ser Pro Phe Phe His Lys
 180 185 190

Thr Pro Glu Thr Ala
 195

<210> 83
 <211> 325
 <212> PRT
 <213> Homo sapiens

<400> 83

Leu Ala Pro Arg Arg Cys Pro Ala Gln Glu Val Ala Arg Gly Val Leu
 1 5 10 15

Thr Ser Leu Pro Gly Asp Ser Val Thr Leu Thr Cys Pro Gly Val Glu
 20 25 30

Pro Glu Asp Asn Ala Thr Val His Trp Val Leu Arg Lys Pro Ala Ala
 35 40 45

Gly Ser His Pro Ser Arg Trp Ala Gly Met Gly Arg Arg Leu Leu Leu
 50 55 60

Arg Ser Val Gln Leu His Asp Ser Gly Asn Tyr Ser Cys Tyr Arg Ala
 65 70 75 80

Gly Arg Pro Ala Gly Thr Val His Leu Leu Val Asp Val Pro Pro Glu
 85 90 95

Glu Pro Gln Leu Ser Cys Phe Arg Lys Ser Pro Leu Ser Asn Val Val

| 100 | | | | | | | | | | 105 | | | | | 110 | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Cys | Glu | Trp | Gly | Pro | Arg | Ser | Thr | Pro | Ser | Leu | Thr | Thr | Lys | Ala | Val | | | | |
| | | 115 | | | | | 120 | | | | | 125 | | | | | | | |
| Leu | Leu | Val | Arg | Lys | Phe | Gln | Asn | Ser | Pro | Ala | Glu | Asp | Phe | Gln | Glu | | | | |
| | 130 | | | | | 135 | | | | | 140 | | | | | | | | |
| Pro | Cys | Gln | Tyr | Ser | Gln | Glu | Ser | Gln | Lys | Phe | Ser | Cys | Gln | Leu | Ala | | | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | | | |
| Val | Pro | Glu | Gly | Asp | Ser | Ser | Phe | Tyr | Ile | Val | Ser | Met | Cys | Val | Ala | | | | |
| | | | | 165 | | | | | 170 | | | | | 175 | | | | | |
| Ser | Ser | Val | Gly | Ser | Lys | Phe | Ser | Lys | Thr | Gln | Thr | Phe | Gln | Gly | Cys | | | | |
| | | | 180 | | | | | 185 | | | | | 190 | | | | | | |
| Gly | Ile | Leu | Gln | Pro | Asp | Pro | Pro | Ala | Asn | Ile | Thr | Val | Thr | Ala | Val | | | | |
| | 195 | | | | | | 200 | | | | | 205 | | | | | | | |
| Ala | Arg | Asn | Pro | Arg | Trp | Leu | Ser | Val | Thr | Trp | Gln | Asp | Pro | His | Ser | | | | |
| | 210 | | | | | 215 | | | | | 220 | | | | | | | | |
| Trp | Asn | Ser | Ser | Phe | Tyr | Arg | Leu | Arg | Phe | Glu | Leu | Arg | Tyr | Arg | Ala | | | | |
| 225 | | | | | 230 | | | | | 235 | | | | | 240 | | | | |
| Glu | Arg | Ser | Lys | Thr | Phe | Thr | Thr | Trp | Met | Val | Lys | Asp | Leu | Gln | His | | | | |
| | | | | 245 | | | | | 250 | | | | | 255 | | | | | |
| His | Cys | Val | Ile | His | Asp | Ala | Trp | Ser | Gly | Leu | Arg | His | Val | Val | Gln | | | | |
| | | | | 260 | | | | | 265 | | | | | 270 | | | | | |
| Leu | Arg | Ala | Gln | Glu | Glu | Phe | Gly | Gln | Gly | Glu | Trp | Ser | Glu | Trp | Ser | | | | |
| | | 275 | | | | | 280 | | | | | 285 | | | | | | | |
| Pro | Glu | Ala | Met | Gly | Thr | Pro | Trp | Thr | Glu | Ser | Arg | Ser | Pro | Pro | Ala | | | | |
| | 290 | | | | | 295 | | | | | 300 | | | | | | | | |
| Glu | Asn | Glu | Val | Ser | Thr | Pro | Met | Gln | Ala | Leu | Thr | Thr | Asn | Lys | Asp | | | | |
| 305 | | | | | 310 | | | | | 315 | | | | | 320 | | | | |
| Asp | Asp | Asn | Ile | Leu | | | | | | | | | | | | | | | |
| | | | | 325 | | | | | | | | | | | | | | | |

<211> 46
<212> PRT
<213> Artificial

<220>
<223> Synthetic

<400> 84

Arg Ser Lys Thr Phe Thr Thr Trp Met Val Lys Asp Leu Gln His His
1 5 10 15

Cys Val Ile His Asp Ala Trp Ser Gly Leu Arg His Val Val Gln Leu
20 25 30

Arg Ala Gln Glu Glu Phe Gly Gln Gly Glu Trp Ser Glu Trp
35 40 45

<210> 85

<211> 46
<212> PRT
<213> Artificial

<220>
<223> Synthetic

<400> 85

Arg Ser Lys Thr Phe Thr Thr Trp Ala Gln Ser Arg Trp Gln His His
1 5 10 15

Ser Val Ile His Asp Ala Trp Ser Gly Leu Arg His Val Val Gln Leu
20 25 30

Arg Ala Gln Glu Glu Phe Gly Gln Gly Glu Trp Ser Glu Trp
35 40 45

<210> 86
<211> 46
<212> PRT
<213> Artificial

<220>
<223> Synthetic

<400> 86

Arg Ser Lys Thr Phe Thr Thr Trp Met Val Lys Asp Leu Gln His His
1 5 10 15

Cys Val Ile His Asp Ala Trp Ser Gly Leu Arg His Val Val Gln Leu
20 25 30

Arg Ala Gln Glu Glu Phe Gly Gln Gly Glu Trp Ser Glu Trp
 35 40 45

<210> 87
 <211> 46
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic

<400> 87

Arg Ser Lys Thr Phe Thr Thr Trp Ser Arg Gln Asp Asn Gln His His
 1 5 10 15

Ser Val Ile His Asp Ala Trp Ser Gly Leu Arg His Val Val Gln Leu
 20 25 30

Arg Ala Arg Asn Glu Val Arg Val Gly Glu Trp Ser Glu Trp
 35 40 45

<210> 88
 <211> 205
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic

<400> 88

Asp Val Pro Pro Glu Glu Pro Gln Leu Ser Cys Phe Ser Pro Asn Lys
 1 5 10 15

Glu Thr Phe Val Cys Glu Trp Gly Pro Arg Ser Thr Pro Ser Leu Thr
 20 25 30

Thr Lys Ala Val Leu Leu Val His Arg Glu Gly Glu Thr Leu Met Phe
 35 40 45

Gln Glu Pro Cys Gln Tyr Ser Gln Glu Ser Gln Lys Phe Ser Cys His
 50 55 60

Phe Gly Lys Gln Tyr Thr Ser Met Trp Arg Thr Tyr Ile Val Ser Met
 65 70 75 80

Ser Val Ala Ser Ser Val Gly Ser Lys Phe Ser Asp Glu Leu Tyr Val
 85 90 95

Asp Val Thr Tyr Ile Leu Gln Pro Asp Pro Pro Ala Asn Ile Thr Val
100 105 110

Thr Ala Val Ala Arg Asn Pro Arg Trp Leu Ser Val Thr Trp Gln Asp
115 120 125

Pro His Leu Ile Asp Leu Lys Thr Gly Trp Phe Thr Leu Arg Phe Glu
130 135 140

Leu Arg Tyr Arg Ala Glu Arg Ser Lys Thr Phe Thr Thr Trp Phe Ala
145 150 155 160

Gly Gln Gln His His Ser Val Ile His Asp Ala Trp Ser Gly Leu Arg
165 170 175

His Val Val Gln Leu Arg Ala Lys Pro Asp His Gly Tyr Trp Ser Glu
180 185 190

Trp Ser Pro Glu Ala Met Gly Thr Pro Trp Thr Glu Ser
195 200 205